

The Routledge Companion to Medieval Philosophy



Edited by Richard Cross and JT Paasch

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THE ROUTLEDGE COMPANION TO MEDIEVAL PHILOSOPHY

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Richard Cross is John A. O'Brien Professor of Philosophy at the University of Notre Dame, a position he has held since 2007. From 1993 to 2007, he was a Fellow of Oriel College, Oxford. He has written extensively on medieval philosophy, with a focus on Duns Scotus. He is currently writing a sequence of books on the metaphysics of Christology from 1050 to 1700.

JT Paasch teaches for the School of Continuing Studies at Georgetown University. He has published on topics in medieval philosophy and theology, and is the author of *Divine Production in Late Medieval Trinitarian Theology* (2012).

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CONTENTS

<i>List of Contributors</i>	<i>xi</i>
<i>List of Abbreviations</i>	<i>xvi</i>
<i>Acknowledgments</i>	<i>xvii</i>
 Introduction	 1
 PART I	
Language and Logic	3
 1 Propositions <i>Nathaniel E. Bulthuis</i>	 5
 2 Qualification <i>Allan Bäck</i>	 19
 3 Kinds of Argument <i>Sara L. Uckelman</i>	 31
 4 Modal Logic <i>Spencer C. Johnston</i>	 43
 5 Logic Games <i>JT Paasch</i>	 57
 PART II	
Metaphysics	77
 6 Matter <i>John Kronen and Sandra Menssen</i>	 79

Contents

7	Form	86
	<i>Thomas M. Ward</i>	
8	Relations	96
	<i>Heine Hansen</i>	
9	Powers	107
	<i>JT Paasch</i>	
10	Identity and Sameness	126
	<i>Andrew W. Arlig</i>	
11	Kinds, Essences, and Natures	139
	<i>Martin Tweedale</i>	
12	Individuation	148
	<i>Daniel D. Novotný and Jorge J. E. Gracia</i>	
PART III		
Cosmology and Physics		159
13	Causality	161
	<i>Graham White</i>	
14	Space and Place	175
	<i>Cecilia Trifogli</i>	
15	Atomism	184
	<i>Aurélien Robert</i>	
16	Qualitative Change	194
	<i>Robert Pasnau</i>	
17	Proofs for God's Existence	202
	<i>William E. Mann</i>	
PART IV		
Psychology		213
18	Soul, Mind, and Body	215
	<i>Paul J. M. M. Bakker</i>	
19	Intellect	225
	<i>Jack Zupko</i>	

Contents

20	Will <i>Cyrille Michon</i>	231
21	Emotions <i>Vesa Hirvonen</i>	242
22	Consciousness <i>Therese Scarpelli Cory</i>	249
PART V		
	Cognition	263
23	Internal Senses <i>Deborah Black</i>	265
24	Cognitive Acts <i>Giorgio Pini</i>	280
25	Abstraction <i>Simo Knuuttila</i>	291
26	Intentionality <i>Gyula Klima</i>	299
27	Mental Language <i>Joël Biard</i>	306
PART VI		
	Ethics and Moral Psychology	315
28	Freedom <i>Tobias Hoffmann</i>	317
29	Reasons and Actions <i>Anthony Celano</i>	336
30	Divine Command Theory <i>Hannes Möhle</i>	345
31	Conscience <i>Douglas C. Langston</i>	354
32	Atonement <i>Thomas Williams</i>	363

PART VII	
Political Philosophy	375
33 Law and Government	377
<i>Jonathan Jacobs</i>	
34 Spheres of Power	394
<i>Stephen Lahey</i>	
35 Democracy and Representation	403
<i>Takashi Shogimen</i>	
<i>Index</i>	<i>413</i>

CONTRIBUTORS

Andrew W. Arlig is Associate Professor of Philosophy at Brooklyn College, The City University of New York, USA. He has published primarily on topics in medieval metaphysics, and especially on medieval theories of parts, wholes, and the constitution and identity of material particulars.

Allan Bäck is Professor of Philosophy at Kutztown University in Kutztown, Pennsylvania, USA. A recipient of the Humboldt Prize, his books include *On Reduplication* (1996) and *Aristotle's Theory of Abstraction* (2013). He has translated three parts of Avicenna's Logic and is currently finishing *Avicenna's Divine Syllogistic* and *Perspective*, an original theory of knowledge.

Paul J. M. M. Bakker is Professor of Medieval and Renaissance Philosophy at Radboud University, Nijmegen, the Netherlands. He mainly works on published and unpublished commentaries on Aristotle's book *On the Soul* (*De anima*) from the late thirteenth to the late sixteenth centuries. He is also involved in a series of editorial projects. Most recently, he has published (with Michiel Streijger) the first two volumes of the critical edition of John Buridan's questions commentary on Aristotle's *Physics*: John Buridan, *Quaestiones super octo libros Physicorum Aristotelis (secundum ultimam lecturam)*. Libri I–II (2015) and Libri III–IV (2016). He is currently preparing the third and final volume of this edition. He is the editor of the book series *Medieval and Early Modern Philosophy and Science* and of the international journal *Vivarium*.

Joël Biard is Emeritus Professor at Tours University, France. His primary research concerns the philosophy of language and philosophy of nature in the Late Middle Ages. He is the author of *Logique et théorie du signe au XIV^e siècle* (1989) and more recently, *Science et nature. La théorie buridanienne du savoir* (2012). He has produced several translations, among them *Jean Buridan, Questions sur l'âme* (2019), and co-edited the collective volume *Blaise de Parme. Physique, psychologie, éthique* (2019).

Deborah Black is Professor of Philosophy and Medieval Studies at the University of Toronto, Canada. She is the author of numerous articles on epistemology and cognitive psychology in medieval Latin and classical Arabic philosophy, as well as of *Logic and Aristotle's "Rhetoric" and "Poetics" in Medieval Arabic Philosophy* (1990).

Nathaniel E. Bulthuis is Assistant Professor of Philosophy at Saint Joseph's University in Philadelphia, Pennsylvania, USA. He has also held appointments at Colgate University and Cornell University, USA. His research focuses primarily on fourteenth-century theories of linguistic and

mental content, with special attention paid to the philosophical views of Walter Burley, an important figure in the history of logic and a fierce critic of William Ockham's nominalist program and many of its attendant theses in the philosophy of language.

Anthony Celano is Professor of Philosophy at Stonehill College in N. Easton, Massachusetts, USA. He is the author of *Aristotle's Ethics and Medieval Philosophy* (2016) and many articles on ancient and medieval philosophy. He is currently editing Robert Kilwardby's *Commentary on the Nicomachean Ethics*.

Therese Scarpelli Cory is the John and Jean Oesterle Associate Professor of Thomistic Studies at the University of Notre Dame, USA. Her research focuses on theories of mind and cognition in medieval Scholasticism, and on the reception of philosophical theories from the Islamic world in thirteenth-century European thought. She has published extensively on medieval theories of self-consciousness and subjectivity, including *Aquinas on Human Self-Knowledge* (2014).

Richard Cross is John A. O'Brien Professor of Philosophy at the University of Notre Dame, USA, a position he has held since 2007. From 1993 to 2007, he was a Fellow of Oriel College, Oxford, UK. He has written extensively on medieval philosophy, with a focus on Duns Scotus. He is currently writing a sequence of books on the metaphysics of Christology from 1050 to 1700.

Jorge J. E. Gracia is the Samuel P. Capen Chair and State University of New York Distinguished Professor in the Department of Philosophy and the Department of Comparative Literature, University at Buffalo, USA. He has authored and edited over 40 books and many articles in metaphysics, medieval philosophy, ethnicity/race/nationality issues, Hispanic/Latino issues, and other fields. He is the editor, with T. Noone, of *A Companion to Philosophy in the Middle Ages* (2003). His most recent books include (with Ilan Stavans) *Thirteen Ways of Looking at Latino Art* (2014) and *Painting Borges: Philosophy Interpreting Art Interpreting Literature* (2012).

Heine Hansen is Associate Professor at the Saxo Institute, University of Copenhagen, Denmark. He works mainly on Latin philosophy in antiquity and the middle ages. His publications include *John Pagus on Aristotle's Categories* (2012), *Logic and Language in the Middle Ages*, co-edited with J. L. Fink and A. M. Mora-Márquez (2013), *History of Philosophy in Reverse*, co-authored with S. Ebbesen, D. Bloch, J. L. Fink and A. M. Mora-Márquez (2014), as well as several articles on the medieval reception of Aristotle's category of relatives.

Vesa Hirvonen is Adjunct Professor of theological ethics and philosophy of religion at the University of Helsinki, Finland, and University Lecturer of religious pedagogy at the University of Eastern Finland. He specializes in medieval philosophy and theology, especially theories of emotion, mental health, and childhood.

Tobias Hoffmann is Professor of Philosophy at The Catholic University of America, Washington, D.C., USA. His most recent book is *Free Will and the Rebel Angels in Medieval Philosophy* (2021), and he has edited and co-edited several anthologies, including *A Companion to Angels in Medieval Philosophy* (2012) and *Aquinas and the Nicomachean Ethics* (2013).

Jonathan Jacobs is Professor of Philosophy and Director of the Institute for Criminal Justice Ethics at John Jay College of Criminal Justice/City University of New York, USA. He is also a member of the doctoral faculties of Philosophy and of Criminal Justice at the CUNY Graduate Center. He works in two main areas. One focuses on issues at the intersection of ethics, political

theory, and criminal justice. The other focuses on medieval moral thought, conceptions of law, and Jewish philosophy. He has been a Visiting Professor or Visiting Scholar at the University of Edinburgh, the Chinese University of Hong Kong, the University of St. Andrews, the Oxford Centre for Hebrew & Jewish Studies, The Hebrew University of Jerusalem, and is a Life Member of Clare Hall, Cambridge. His most recent book is *The Liberal State and Criminal Sanction: Can We Achieve Justice and Civility?* (2020).

Spencer C. Johnston is a British Academy Postdoctoral Research Fellow at the University of Cambridge, UK, and a research associate at Peterhouse College at the university. His primary research interests are in the history and philosophy of logic, primarily in the Middle Ages. In particular, his interests focus on the history of modal logic and non-classical logic, as well as the relationship between logic and natural philosophy.

Gyula Klima is Professor of Philosophy at Fordham University in New York City, USA, and Director of the Center for the History of Ideas at the Hungarian Research Institute, Hungary. His research focuses on comparative studies of medieval and contemporary theories in philosophical logic, metaphysics, and the philosophy of mind. His recent books include *Questions on the Soul by John Buridan and Others* (2017), and *Intentionality, Cognition and Mental Representation in Medieval Philosophy* (2015).

Simo Knuuttila is Professor Emeritus of Theological Ethics and the Philosophy of Religion at the University of Helsinki, Finland. His publications include *Modalities in Medieval Philosophy* (1993, repr. 2019) and *Emotions in Ancient and Medieval Philosophy* (2004).

John Kronen is Professor of Philosophy at the University of St. Thomas in St. Paul, Minnesota, USA. He specializes in metaphysics, the philosophy of religion, and baroque scholasticism. He is the author of numerous articles and the co-author, with Eric Reitan, of *God's Final Victory: A Comparative Philosophical Case for Universalism* (2013), and is the co-translator, with Jeremiah Reedy, of four works of baroque scholasticism, among them *On the Formal Cause of Substance: Metaphysical Disputation XV* (2000), by Francisco Suarez.

Stephen Lahey is Happold Professor of Religious Studies at the University of Nebraska, USA. His publications include *John Wyclif* (2009) and a translation of Wyclif's *Triologus* (2013). He is working on a study of Wyclif's *Summa de Ente*, and on a monograph on the origins of the Hussite movement in medieval Bohemia.

Douglas C. Langston is Professor of Philosophy and Religion at New College of Florida, USA. He is the author of *Conscience and Other Virtues* (2001) and *God's Willing Knowledge* (1986), and the editor of *WW Norton's Critical Edition of Boethius's Consolation of Philosophy* (2010). His articles have appeared in a number of journals and edited volumes.

William E. Mann is the Marsh Professor of Intellectual and Moral Philosophy Emeritus at the University of Vermont, USA. He specializes in philosophical theology, with an emphasis on medieval contributions to the discipline. Two volumes of his essays have been published.

Sandra Menssen is Professor of Philosophy at the University of St. Thomas in St. Paul, Minnesota, USA, and Associate Dean of the University of St. Thomas's School of Education, USA. She is the author of numerous articles in the philosophy of religion and the co-author, with Thomas D. Sullivan, of *The Agnostic Inquirer: Revelation from a Philosophical Standpoint* (2007).

Cyrille Michon is Professor of Philosophy and Chair of metaphysics at the University of Nantes, France. As a medievalist he has published on Ockham (1994) and Aquinas (translation of the *Summa contra Gentiles*, 1999). He has since then moved toward research in Metaphysics and Philosophy of Religion, working mainly on Free Will, Moral Responsibility, and Divine Foreknowledge. His recent books in these areas include *Prescience et liberté* (2004) and *Qu'est-ce que le libre arbitre?* (2011).

Hannes Möhle is leader of the Albertus-Magnus-Institut in Bonn, Germany, and Apl. Professor at the Rheinische Friedrich-Wilhelms-Universität, Germany. He teaches at home and abroad. His research focuses on medieval philosophy, especially ethics and metaphysics. His recent books include *Albertus Magnus* (2015, in the *Zugänge zum Denken des Mittelalters* series) and *Die Philosophie des Mittelalters: Eine Einführung* (2019).

Daniel D. Novotný is Assistant Professor of Philosophy at the University of South Bohemia, Czech Republic. He is the author of *Ens rationis: From Suárez to Caramuel* (2013), co-editor of *Metaphysics: Aristotelian, Scholastic, Analytic* (2012), *Neoaristotelian Perspectives in Metaphysics* (2016), and *Pedro Hurtado de Mendoza (1578–1641): System, Sources and Influence* (forthcoming), and co-translator of Aquinas's *Summa Theologiae: Questions on Angels* (2017). He authored or co-authored several papers and book chapters, mostly in the history of scholastic metaphysics. He also serves as the editor-in-chief of *Studia Neoaristotelica: A Journal of Analytical Scholasticism* (since 2010), as the Vice-Dean for International Relations at his institution (since 2017), and an HR Award consultant (since 2018).

JT Paasch teaches for the School of Continuing Studies at Georgetown University, USA. He has published on topics in medieval philosophy and theology and is the author of *Divine Production in Late Medieval Trinitarian Theology* (2012).

Robert Pasnau is College Professor of Distinction in the Department of Philosophy at the University of Colorado, Boulder, USA. He is the editor of the *Cambridge History of Medieval Philosophy* (2009) and the founding editor of *Oxford Studies in Medieval Philosophy*. His most recent book, *After Certainty: A History of Our Epistemic Ideals and Illusions* (2017), is based on his Isaiah Berlin Lectures delivered at Oxford University in 2014.

Giorgio Pini is Professor of Philosophy at Fordham University in New York City, USA. His research focuses on Duns Scotus and other late thirteenth- and early fourteenth-century thinkers. He has published extensively on later medieval metaphysics, logic, theories of cognition, and moral psychology.

Aurélien Robert is Senior Research Fellow at the CNRS, France, and Vice-Director of the Centre d'Etudes Supérieures de la Renaissance. In 2019, he received the Bronze Medal of the CNRS for his works on medieval philosophy. He is the co-author (with Ch. Grellard) of *Atomism in Late Medieval Philosophy and Theology* (2009), and his new book *Epicurus in Hell* will be published in 2020.

Takashi Shogimen is Professor of History at the University of Otago, Dunedin, New Zealand. He has published widely on medieval European and modern Japanese political thought including seven sole-authored books. His 2013 monograph in Japanese on *The Birth of European Political Thought* was awarded the 2013 Suntory Prize, one of Japan's national prizes for humanities and social sciences. His other books include *Ockham and Political Discourse in the Late Middle Ages* (2007) and *The Structure of Patriotism* (2019).

Cecilia Trifogli studied Philosophy and Mathematics at the University of Pisa and Milan, Italy. She is Professor of Medieval Philosophy at the University of Oxford, UK. She has published extensively on the tradition of Aristotle's *Physics* in the Middle Ages.

Martin Tweedale has a PhD in philosophy from UCLA, has taught at the University of Pittsburgh, USA, the University of Auckland, New Zealand, and the University of Alberta, USA, where he is now Professor Emeritus. He is the author of *Abailard on Universals* (1976) and of *Scotus vs. Ockham: A Medieval Dispute over Universals* (1999), as well as numerous articles on ancient and medieval logic and metaphysics. He recently co-authored a translation of John Philoponus' commentary on the first five chapters of Aristotle's *Categories* (2015).

Sara L. Uckelman is Assistant Professor of Logic and Philosophy of Language at Durham University, UK. Her research focuses on modal logic, both medieval and modern. She has also published numerous short science fiction and fantasy stories and is the editor-in-chief of the *Dictionary of Medieval Names from European Sources*.

Thomas M. Ward is Associate Professor of Philosophy at Baylor University in Waco, Texas, USA. He specializes in the history of philosophy, focusing on the late thirteenth and early fourteenth centuries. Ward is the author of *Divine Ideas* (forthcoming) and *John Duns Scotus on Parts, Wholes, and Hylomorphism* (2014). He is also the author of many research articles in the history of philosophy, including "A Most Mitigated Friar: Scotus on Natural Law and Divine Freedom" in *American Catholic Philosophical Quarterly* 93:5 (2019), winner of the journal's Rising Scholar Essay Contest in 2018.

Graham White was previously Lecturer at Queen Mary University of London, UK. He has published on philosophy, the history of philosophy, and on computer science. His book *Luther as Nominalist* (1994) is in the process of revision and republication.

Thomas Williams is Professor of Philosophy at the University of South Florida, USA. His recent work includes a translation of Augustine's *Confessions* (2019), *The Cambridge Companion to Medieval Ethics* (2018), and *John Duns Scotus: Selected Writings on Ethics* (2017).

Jack Zupko is Professor of Philosophy at the University of Alberta, USA, and Editor of the *Journal of the History of Philosophy*. He has published numerous research articles and four books, including *John Buridan: Portrait of a Fourteenth-Century Arts Master* (2003), which was named a Choice Outstanding Academic Title of 2003, and, more recently (with Edward Buckner), *Duns Scotus on Time and Existence* (2014), a translation and commentary on Scotus' *Questions on Aristotle's De interpretatione*.

ABBREVIATIONS

Aristotle

<i>APo.</i>	<i>Posterior Analytics</i>
<i>APr.</i>	<i>Prior Analytics</i>
<i>Cat.</i>	<i>Categories</i>
<i>DA</i>	<i>De Anima</i>
<i>De Interp.</i>	<i>On Interpretation</i>
<i>Met.</i>	<i>Metaphysics</i>
<i>Phys.</i>	<i>Physics</i>
<i>SE</i>	<i>Sophistical Refutations</i>
<i>Top.</i>	<i>Topics</i>
<i>Eth.</i>	<i>Nichomachean Ethics</i>

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INTRODUCTION

The era from 1050 to 1500 was one of remarkable philosophical activity in the West—certainly the most intensive such period prior to the twentieth century. Equipped with logic as expressive as contemporary first-order logic (see Parsons 2014), and with many of the classics of earlier Greek and Islamic philosophy at hand, thinkers from the Middle Ages developed a huge variety of innovative theories in almost all areas of the discipline. The institutional context was the early university, organized, much like the modern one, around a standard undergraduate liberal arts curriculum (at the time largely comprising training in logic and philosophy of language), followed by study in one of the professional graduate schools (medicine, law, or theology). Many of the most talented students opted for graduate training in theology, which, combined with the training in arts, could take close to 15 years or more, and focused almost exclusively on topics that we would regard as philosophical in character. This provided ample scope for the development of sophisticated theories in metaphysics, ethics, philosophy of mind, and more. So the Middle Ages was *par excellence* the period of the professional philosopher, and, as one would expect, was full of discussion, intense debate, and deep disagreement.

The chapters gathered together here cover many of the primary philosophical topics discussed by these professional philosophers during this period of medieval Latin scholasticism. Taken together, these chapters are intended to offer an introduction and guide to the variety and diversity of technical theories that are found in the texts of these philosophers, as well as to some of the modern scholarship that surrounds them.

The *lingua franca* of the period was Latin, and, like all philosophers, the medieval ones developed within it their own highly specific technical language, of which ours is a descendent, but a much-altered one. So it is very hard for the modern neophyte—even one with a first-rate philosophical training of their own—to dive into the field of medieval philosophy and make much progress without some kind of guide. There is nothing a book such as this can do about the linguistic problem. But it is not at all difficult to draw out resemblances and dissimilarities between medieval theories and terminology and modern ones: something that should be no surprise given the evident continuities, admittedly long occluded, between medieval and modern philosophy (on which, see for instance Pasnau 2011). So what we provide here constitutes an attempt to give a reader with no prior knowledge of medieval philosophy what they need to work with the technical texts and scholarship in the field. We have tried to be particularly sensitive to the sheer range of medieval views on the subjects under discussion. There simply was no “standard” medieval view on almost any philosophically interesting topic. On the contrary, medieval philosophy was a powerfully argumentative and dialectical discipline, with the constant back-and-forth of debate,

and the chapters in this volume try to bring this out. Philosophy in the Middle Ages was also notable for what is known as the scholastic method: its rigorous attention to disambiguation and conceptual analysis—features that it has in common with much recent work in the Anglophone tradition of philosophy.

We have arranged the volume topically rather than chronologically, and the chapters do not focus on any one particular scholastic thinker. Rather, each chapter focuses on the various theories the scholastics proposed for the topic at hand. Taking the volume as a whole, we aim to cover most of the central topics of philosophy: language and logic, metaphysics, cosmology and physics, psychology, cognition, ethics and moral psychology, and political philosophy. We have tried to be systematic, and we have also tried to organize the themes under the most useful headers and titles. Some are more modern, some are more medieval. We are aware that this risks the problem of a certain kind of anachronism. But we believe that this arrangement maximizes the book's usefulness, allowing the reader both to focus on distinctively medieval topics and to see how and in what way distinctively modern concepts arise in the Middle Ages. It frequently turns out that medieval writers have a lot to say on such matters, but framed in slightly different terminology, terminology not designed to reveal the presence of theories on the relevant topics. Of course, many issues occur in clearly theorized ways in both medieval and recent philosophy (e.g., substance, identity); and many medieval topics arise too in modern discussions, though not always using the same terminology, or in ways that obviously reveal the presence of theories on the relevant subjects (e.g., form, accident). Our approach enables both resonances and divergences to become apparent. And the commonalities and shared traditions mentioned above to some extent obviate the dangers of anachronism.

The historical focus of the volume is primarily on Latin scholasticism, especially the thirteenth and fourteenth centuries—though not exclusively so. One reason for this is that there already are excellent handbooks on Islamic philosophy (Nasr and Leaman 1996; Taylor and López-Farjeat 2016). And to the extent that there are historical links and commonalities between medieval Islamic philosophy and modern European philosophy (e.g. Avicenna and Leibniz), they tend to be mediated through medieval Latin philosophy, which adopted various parts of the Islamic tradition through Latin translations. So for the heuristic purposes of this volume, an emphasis on the Latin tradition offers the most fruitful approach. And for better or worse, most of the names likely to be familiar to and useful to the likely reader of this book come from the thirteenth and fourteenth centuries: for example, Thomas Aquinas, Duns Scotus, and William of Ockham. But other notables appear too: particularly, from the earlier period, Anselm and Abelard.

The combination of medieval and modern topics will, we hope, make the volume useful to the reader with a basic grounding in contemporary philosophy. But we have tried to pitch these chapters so that their introductory character will make them accessible to others interested in the history of medieval philosophy as well, be they theologians or historians. The chapters avoid big narratives and focus on the details, mindful of what scholastic authors said and meant, and careful to avoid saying more than the texts permit. One hope is that the approach will be illuminating for the expert in the field; but our aim, above all, is to be helpful to the interested beginner.

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PART I

Language and Logic

1

PROPOSITIONS

Nathaniel E. Bulthuis

When philosophers in the twenty-first century speak about propositions, they typically intend to refer to a kind of entity that (ideally, at least) fulfills certain alethic, cognitive, and semantic roles. In particular, by “proposition,” contemporary philosophers mean to talk about a kind of entity which is:

- 1 the primary bearer of alethic properties,
- 2 the object of one’s propositional attitudes, such as belief,
- 3 the meaning, or sense, of (one’s utterances of) declarative sentences, and
- 4 the referent of that-clauses.¹

For most contemporary philosophers, then, propositions are defined by their functional roles. Contemporary debates about the proposition typically focus on the nature and status of the proposition itself: is it plausible that one entity can fulfill all of these various roles? Assuming that one entity could fulfill all (or even most) of those roles, is that entity mind-independent? abstract? structured? If structured, what is it composed of, and what unifies it? In virtue of what does it play the functional role(s) that it does? And so on.

When medieval philosophers speak of propositions (*propositiones*; sing., *propositio*), in contrast, they do not necessarily mean to refer to entities of this sort. Rather, they intend to refer to utterances—typically tokens, but sometimes types—of declarative sentences.² For philosophers in the medieval period, then, the central task with respect to the proposition needn’t be to explain how it can fulfill the alethic, cognitive, and semantic roles mentioned above. Yet this does not mean that the proposition (as they understood it) was not a source of intense philosophical interest throughout the medieval period. Rather, medieval philosophical reflection on the proposition typically focuses on what one does in uttering a declarative sentence, namely, that one says (means) something.³ The medieval interest in propositions is motivated by considerations of the nature of saying (meaning) itself, and in particular by what sort of thing, if any, one says (means) in saying something—a concern typically expressed in the medieval tradition by an interest in what a proposition signifies. Moreover, as many medieval philosophers accepted—to varying degrees—that cognition is linguistic in nature, so that to have a belief, for example, is (at least in part) to form a declarative sentence in mental language, medieval interest in the proposition likewise concerned what sort of thing, if any, one believes in believing something. Consequently, though many medieval philosophers mean something very different by “proposition” than do most contemporary philosophers, the medieval philosophical concern about the proposition anticipates many of the

motivations for contemporary theories of the proposition, in the sense that philosophers understand the term today.

The goal of this chapter is to provide an introduction to the main positions that arise within medieval philosophical reflection upon propositions, as they understood them. I will begin (in the section “Language and Cognition”) with some brief remarks on the relationship between propositions in natural language and thought. After that, I will focus on medieval views about the nature of thought itself, and in particular on the development of the claim that thought is propositional in structure—that is, that thinking occurs within a mental language, populated by mental propositions. I will first consider (in the section “Mental Propositions”) the mental proposition itself: the sort of philosophical antecedents we find in the medieval period to the full-fledged accounts of mental propositions and mental language developed in the fourteenth century, and the various accounts of the metaphysics of the thought developed during that century and the one that preceded it. I will then (in the section “The Signification of the Mental Proposition”) focus on a central semantic debate in medieval philosophy about the mental proposition, namely, whether—and what—it signifies. I will conclude (in the section “Conclusion”) with a short discussion of the secondary literature on medieval theories of the proposition.

Language and Cognition

The term “*propositio*,” in the broad sense that medieval philosophers typically used it, appears to first enter Latin philosophical discourse in a second-century treatise on logic called the *Peri Hermeneias*.⁴ The author of that treatise, Apuleius (d. 170), argues that a proposition is a certain kind of *oratio* (speech). An *oratio* is an utterance of some sort: for example, a command or an inquiry.⁵ Of the various kinds of *orationes*, however, Apuleius identifies the proposition as particularly important, for only a proposition expresses a “complete thought” (i.e., a judgment of some sort, such as a belief), such that it is the only kind of *oratio* capable of bearing truth or falsity.⁶ In other words, the proposition is the only sort of *oratio* that is a statement-making utterance.

Through Apuleius’s treatise, “*propositio*” and “*oratio*” come to constitute part of the standard Latin logical terminology in the late antique period. Especially important for our purposes are the uses to which Boethius (d. 524) puts that terminology. Following Aristotle’s division of *logos* in the first chapter of the *De Interpretatione*, Boethius argues that *orationes* can be divided into those which are incomplete and those which are complete. Incomplete *orationes* are those utterances that are composite (that is, they are constituted by uttered expressions, *voces*, which are themselves meaningful, such as in “pale Socrates”) but which do not constitute the utterance of a sentence. Complete *orationes*, in contrast, are utterances of sentences: questions and commands, for example.⁷ Complete *orationes* also include propositions, the kind of *oratio* of chief interest to the logician.⁸ Propositions garner that interest because they are the only sorts of *orationes*—complete or incomplete—that are bearers of alethic value, and so can figure in a demonstration.

For Boethius, then, a proposition is a kind of utterance in natural language that has alethic properties. But why, exactly, do propositions have alethic properties? Boethius argues that a proposition is truth-apt—indeed, that it has the truth value that it does—because it is related to one’s thought that something is or is not the case, “in which truth and falsity are primarily engendered” (1877: 49.27–32). On the view of Boethius—a view informed by Aristotle and one which becomes standard during the medieval period—a proposition expresses the thought of the speaker that something is or is not the case.⁹ It is the thought that something is or is not the case that Boethius (following Aristotle) claims is primarily true or false; propositions are true or false in a secondary, or derivative, sense.¹⁰

How do propositions express the thoughts of the speaker? Boethius argues that “a proposition is an *oratio* signifying something true or something false.”¹¹ According to Boethius, then, a proposition expresses a thought via signification. And to signify (*significare*), according to Boethius’s

translation of Aristotle's *De Interpretatione*, is to "establish an understanding," that is, to bring about a thought in the mind of one's audience.¹² Nouns and verbs, by themselves, bring about a thought of something in the world; "Socrates" brings about a thought of Socrates, for example, and "runs" a thought of running. When nouns and verbs are joined together to form a statement-making utterance, then, we might expect that utterance itself to itself bring about a certain thought, namely, the thought that something is or is not the case.¹³ Consequently, a speaker expresses her thoughts to her audience by using a proposition to signify—that is, to bring about—her thought that something is or is not the case within the minds of her audience members.

Whatever its origins and motivations, Boethius's position—that a proposition signifies a thought that something is or is not the case—becomes the received view in the medieval period. In the twelfth century, for example, Peter Abelard (d. 1142) argues that propositions signify thoughts in that they generate those thoughts. Likewise, the fourteenth-century philosopher John Buridan (d. 1358) argues that propositions in natural language signify propositions in mental language. And one finds similar views defended in the generations between those two philosophers: for example, by Thomas Aquinas (d. 1274) and John Duns Scotus (d. 1308) in the thirteenth century.

One notable exception to this position is William Ockham (d. 1347). Ockham denies that any proposition—whether in natural or mental language—is significative. Our discussion of part of Ockham's reasoning for holding this view will need to wait until the section "The Signification of the Mental Proposition", when we examine the signification of mental propositions. But Ockham's position is also due to his more general view about the relationship between natural and mental language. According to Ockham, simple categorematic expressions in natural language—nouns and verbs—directly signify things in the world. "Socrates," for example, signifies Socrates himself, rather than some thought, or concept, of him. In contrast, many philosophers throughout the medieval period held that such simple expressions in natural language immediately signify concepts, and signify things only mediately, in virtue of the fact that the concepts which those expressions signify, themselves represent those things. Ockham does not deny that concepts play a crucial role in signification; simple expressions in natural language acquire their significative function only in virtue of being linked in a certain way to the concepts possessed by the individual who imposes those expressions onto those things. Yet he argues that the relationship between expressions in natural language and mental language is rather one of subordination—simple expressions in natural language signify things by being subordinated to concepts which signify those things naturally—rather than of signification.¹⁴ If, then, propositions in natural language were to signify something, they would need to signify that which their mental counterparts signify. Consequently, if Ockham were to deny that mental propositions signify anything at all (and, as we will see shortly, he does), then we should expect that, on his account, propositions in natural language will not signify anything as well—which is in fact his view.

Mental Propositions

For many philosophers in the medieval period, then, a proposition in natural language signifies a thought of a certain sort, namely, the thought that something is or is not the case. This view is Boethius's first major contribution to medieval theorizing about propositions. His second view concerns the nature of thought itself. In the same work in which he argues that propositions signify thoughts, Boethius suggests that those thoughts are themselves linguistic in nature. Boethius writes, for example, that there are in fact three kinds of speech: written, spoken, and mental.¹⁵ The former two are forms of "outer" speech, while the last constitutes "inner" speech, that is, "the speech of the mind and the intellect" (1877: 24.24). Indeed, Boethius argues in at least one text that, just as natural language is partly constituted by nouns and verbs, so too one finds nominal and verbal elements in cognition itself (1877: 30.6–10).

The suggestion by Boethius (among others¹⁶) that cognition is in some sense linguistic has a profound impact on the development of medieval philosophy of mind. One finds repeated use of the notion of a mental word, for example, playing a prominent role in theories of cognition throughout the medieval period—initially as a theologically loaded notion, a reflection in understanding of the divine word spoken by God the Father, and then slowly transitioning into a key notion in the theories of mental language developed in the fourteenth century. Just as important, there is a long medieval tradition of regarding thought as combinatorial in nature.¹⁷ In the twelfth century, for example, Abelard argues that propositions in natural language signify a certain complex thought, composed of three simple *intellectus*—intellectual acts corresponding to the subject, the predicate, and the copula of the proposition in natural language—conjoined into a unit by the mind, where that unit is the thought that something is or is not the case.¹⁸ Likewise, for Aquinas in the thirteenth century, cognition is a matter of the mind’s predicating one “species,” or concept, of another, thereby representing the inherence of a form in matter or an accident in a subject. The combinatoriality of thought was the received view in the fourteenth century as well. In fact, that view only comes to be challenged in the fourteenth century on worries about the unity of the mental proposition.¹⁹

This general commitment to the combinatoriality of thought laid the groundwork for a more specifically compositional approach to cognition in the late thirteenth and fourteenth centuries. In particular, philosophers in the late medieval period came to regard thought as having a syntactic and semantic structure that mirrored in all relevant respects that of natural language. Accounts of this sort were fully developed in the fourteenth century by philosophers such as Walter Burley (died c. 1345), William Ockham, and John Buridan, where the pertinent syntactic and semantic divisions of natural language—as well as the relationship of syntax to semantics—were mapped onto the mental.²⁰ The key move for these individuals was the application to mental propositions of the theory of supposition, a semantic theory originally used to (among other things) specify the truth conditions of a proposition in natural language in terms of the things for which its subject and predicate terms stand, relative to a linguistic context. By applying the theory of supposition to mental language, Ockham and others were able to explain the supposition of the terms of propositions in natural language by appeal to the supposition of the terms of mental propositions to which those propositions were subordinated. And the supposition of the terms of mental propositions could themselves be explained by appeal to the natural relations of signification that those concepts bear to their significates, and to various rules that determine the supposition of a concept relative to a given context in mentalese.²¹ The result is a sophisticated theory of linguistic meaning, applicable both to natural and mental language, which constituted a powerful tool of analysis not just in logic, language, and mind, but also in epistemology, theology, and the sciences.

Even as there was general agreement in the medieval period that cognition was combinatorial—even compositional—in nature, there were however significant disagreements about the metaphysics of cognition itself. The dominant view during the medieval period was that the mind formed a thought that something is or is not the case out of accidents inhering in it—for example, its qualities, relations, or acts. These accidents were seen to be representational, so that what the mind combines are mental representations of things in the world. Accounts of this sort are developed in the twelfth, thirteenth, and fourteenth centuries—though in different ways, and for different reasons. Perhaps the best representative of this view is Thomas Aquinas. Aquinas argues that thought (or “judgment”) is a matter of the mind’s predicating one “species” of another. A species is, in this context, a certain form that inheres in the mind “as in a subject,” that is, it bears the same relationship to the mind as paleness, for example, does to a pale individual. One acquires species ultimately from her interaction with the world; Aquinas is thus an empiricist about concept acquisition. The end result of one’s cognitive processing is understanding, in which the mind predicates one species of another in such a way that it knows something to be the case. The

product of this act of understanding is a mental word, reflecting the production of truth—the divine word—from God the Father.

In Aquinas’s account, species represent due to conformality: a species inhering in the mind represents a thing because it is a form of the same sort as a form inhering in the thing it represents. One potential difficulty for Aquinas’s account of mind generally, however, is to explain how the same sort of form that inheres in a thing and makes it what it is, could also be said to inhere in the mind without the mind itself becoming that sort of thing. How can the form of being ten feet tall, for example, inhere in the mind without the mind itself being ten feet tall?

Partly in response to these difficulties, Scotus proposes a slightly but significantly different account of conformality. Scotus suggests that there is not one but rather two forms essential to cognition: one form that inheres in the mind “as in a subject,” and another form that exists in the mind only objectively, such that the latter form is “contained” in the former.²² Scotus’s suggestion, in other words, is that we separate content from its representational vehicle. The form which inheres in the mind, which Scotus calls a concept (*conceptus*), is the vehicle, representing things outside of the mind. The form that exists merely objectively in the mind—the same form possessed by various individuals outside of the mind—is that vehicle’s content, in virtue of which a concept represents. Indeed, insofar as we consider a thing irrespective of its matter, that is, only in virtue of its form, we can even call that content a “thing,” *res*.

Scotus’s account of mental representation is fascinating in its own right, but it is significant for our purposes because, in his commentaries on the *De Interpretatione*, Scotus proposes that, beyond a proposition composed of concepts, the mind is able to produce a “composition of things,” that is, something composed of the contents of its concepts. He writes, for example, that

this composition [i.e. this mental proposition] is not out of species but out of things—not, however, as they exist but as they are understood. And therefore truth and falsity are said to concern composition and division of the understanding, because that composition is caused by an act of understanding.²³

Consequently, the product of a thought that something is or is not the case—what we can call that thought’s content—is a certain composition containing conceptual contents as its parts. And it is this composition, rather than a proposition composed of the concepts themselves, that propositions in natural language signify (Scotus 2014: 35, para. 33).

Crucially for Scotus, conceptual content, though a “thing,” still has merely objective existence within the mind, not subjective existence outside of it. A half-generation after Scotus, however, another philosopher—Walter Burley—argues that the content of a concept needn’t have a mere objective existence in the mind. Rather, it can be—and often is—something that exists wholly outside of the mind. Like Scotus, moreover, Burley argues that the mind can fashion the contents of concepts into mental propositions. And so, on Burley’s view, mental propositions turn out to be themselves composed of things that exist outside the mind (*res extra animam*).²⁴ On Burley’s account, for example, the mental proposition that Socrates is human is composed of Socrates—the man in Athens himself—and humanity, a universal existing outside the mind which Socrates might possess.

Burley’s account represents the farthest that the pendulum swings in favor of a strongly realist account of the constituents of mental propositions. The evolution of the thought of his contemporary, William Ockham, represents a swing back to a strongly mentalist account. The account of mental propositions that Ockham defends very early in his career reflects to some degree elements of the accounts developed by Scotus and Burley. At that time, Ockham argued that mental propositions are typically constituted by *ficta*. These *ficta* differ from Scotus’s “things as they are understood,” in that they are not the same as certain forms that exist in reality; rather, they are products

of intellectual activity.²⁵ Like Scotus's "things as they are understood," however, Ockham's *ficta* have merely objective existence in the mind. Even more significant, on Ockham's early account, some mental propositions—namely, singular mental propositions—appear to be composed (at least partly) of things outside the mind (Karger 1996: 210–229). On this account, for example, the mental proposition that Socrates is human is composed not only of a certain *fictum*—the product of an act of thinking about humans, which represents individual humans—but also, as on Burley's view, of Socrates himself.

At some point in the 1320s, however, Ockham comes to hold that *ficta* are not required for a compelling theory of mind. Rather, all that is required are mental acts themselves—acts which have no products.²⁶ That change in his theory of mind has implications for his theory of mental propositions, for he now maintains that mental propositions—whether singular or general—are composed entirely of mental acts, that is, accidents really inhering in the mind, representing particular substances, qualities, or relations outside of it. In other words, Ockham's mature view involves a reversion back to an account of the metaphysics of the mental proposition similar to the sort defended by Aquinas in the thirteenth century—though, it must be noted, differing from Aquinas's account in how and why accidents of the mind represent.

From roughly 1250 to 1350, then, accounts of the metaphysics of mental propositions swing from mentalist accounts of the constituents of those propositions, to strongly realist accounts, and then back to a strong commitment to mentalism. The development of these different accounts of the metaphysics of mental propositions reflects an intense interest at that time in the nature of mental representation generally, and the mental proposition in particular. But that interest was not limited merely to the metaphysics of the mental proposition. Rather, there was just as intense an interest in the semantics of the mental proposition, and in particular in whether mental propositions are signs of something else.

The Signification of the Mental Proposition

Throughout medieval history, there was a strong theological interest in the nature of the objects of religious belief. That interest comes to the fore in the twelfth and thirteenth centuries, where two opposing camps develop.²⁷ The first, which we will call the *complexum* camp, argues that the object of faith is an *enuntiabile* or *complexum*—a proposition-like object that is, for example, expressed when one says the creed. The second, which we will call the *reist* camp, argues that the object of faith is something (*aliqua res*)—for example, Christ—or some collection of things in the world. These theological debates anticipate (and then are subsumed by) a broader philosophical debate that occurs in the thirteenth and fourteenth centuries about the signification of the mental proposition. Within that debate, four positions emerge: nihilism, reism, sui generism, and modism. I will take each of these positions in turn.

Nihilism. Nihilists deny that mental propositions as such signify anything. Some nihilists (e.g., Scotus, Burley,²⁸ and Ockham) deny that mental propositions signify anything at all.²⁹ Others (e.g., Buridan) allow that there is some loose sense in which a mental proposition signifies something, but argue that its signification is reducible to the signification of one or both of its terms.³⁰

Nihilism has its roots in the *complexum* camp mentioned above. For the *complexum* theorist, the object of faith is a certain complex thing, a bearer of truth value. Many philosophers in the fourteenth century readily identified that *complexum* as a mental proposition. On this view, the object of faith—and, more generally, the object of judgment—is a mental proposition. Prominent defenders of this view include Scotus, the early Ockham, and Buridan. On Scotus's account, for example, belief and similar attitudes are mental acts of judgment, which take as their objects mental propositions.³¹

Yet not all nihilists regarded mental propositions as objects of judgment. Rather, some denied that belief and similar attitudes have any objects at all, or at least over and above the things that are or are represented by the terms of a mental proposition. Views of this sort distinguish between what we can call the content object and referential objects of an act of judgment (Brower-Toland 2007: 98–100). On this kind of view, a judgment can have referential objects—that is, it can be about the things that are or are represented by the terms of a certain mental proposition—but it has no content object because judgment is not a relation directed at a mental proposition but rather a certain contentful activity of the mind, namely, the activity of constructing the mental proposition itself. The two most prominent defenders of this sort of account are Burley and (excepting cases of demonstrative judgment) the later Ockham. I will briefly discuss Burley’s account here.³² Unlike most philosophers in the fourteenth century, Burley does not recognize a distinction between force and content. For him, the mind’s formation of a mental proposition itself involves some attitude or other.³³ On this view, for example, judgment is not a relation to a mental proposition, but rather an activity of predicating one thing in the world of another, both of which things are objects of cognition. Consequently, the mental proposition is not what is believed, but rather is (at least partly constituted by) the act of believing itself. A belief can be said to be about things in the world—Socrates and the property of humanity, for example—but it is not, on Burley’s account, a relation to some proposition. Rather, it is a certain activity that the mind undertakes: the predication of one thing of another.

Reism. Whereas nihilism can be seen as a descendant of the *complexum* position, reism is—unsurprisingly—a descendant of the reist camp. Unlike nihilists, who deny that, strictly speaking, a mental proposition itself signifies anything, reists hold that a proposition does in fact signify something, in just the way that its terms signify things. Reist accounts can be regarded as either simple or complex.

Simple reism is the view that a proposition signifies something in the world—that is, some entity falling within one of the ten Aristotelian categories. Perhaps the most well-known defender of this form of reism is Walter Chatton (d. 1343), a close colleague and oft philosophical critic of William Ockham. In contrast to what he takes to be Ockham’s account of judgment—that the object of judgment is a mental proposition—Chatton (2002: d. 39, a. 2) argues that the object of judgment is not a mental proposition but rather something, or things, in the world. Take, for example, the belief that God is three and one. The object of that belief, Chatton argues, is not the mental proposition that God is three and one; rather, it is God himself. On this view, it is God, and not a mental proposition, that one “assents” to. None of this is to suggest that Chatton does not regard thinking to be linguistic in nature. On the contrary, Chatton readily accepts Ockham’s thesis that thinking occurs within a language of thought, such that belief requires (in part) the formation of a mental proposition. But he denies that it is the mental proposition itself which is what one believes. On the contrary, what one believes is what is signified by that proposition: God, for example.

Critics of simple reism typically argue that the view cannot sufficiently distinguish between simple and complex mental activity: between a thought of God, for example, and the thought that God is three and one. But there must be a difference, those critics argue because the latter but not the former is truth-evaluable. Complex reism can be seen as one sort of response to that criticism. Complex reism is the view that the significate of a mental proposition is in some way distinct from the significate of any of its terms. Proponents of this approach include William Crathorn (fl. 1330s), Richard Brinkley (died c. 1379), and John Wyclif (d. 1384). Broadly speaking, on this view, a mental proposition signifies some structured whole composed of the significates of its terms. On Brinkley’s approach, for example, a mental proposition signifies an *n*-tuple of the significates of its terms (1988: 34–51, esp. 34–35).

Sui Generism. Whereas reists attempts to locate the significate of the proposition in some way within one or more of the Aristotelian categories, sui generists argue that the significate of a mental proposition falls completely outside of that schema. Sui generism in fact first arises not out of theological debates in the thirteenth century but rather develops in the twelfth century, in the philosophy of Peter Abelard and his immediate successors.³⁴ Abelard argues that a proposition in natural language, in addition to signifying a thought, also signifies a *dictum propositionis*, that is, what is said by the proposition. *Dicta* are, on Abelard's view, the primary bearers of truth and falsity, as well as the fundamental bearers of modality. A *dictum*, Abelard is keen to emphasize, is not a thing (*res*), nor is it an essence (*essentia*) or even a something (*aliquid*). A *dictum* is none of these things because the semantic role of a proposition is not (like a noun) in naming a thing (*res*) but rather in saying (*dicendo*) that something is or is not the case (1919: 327.18–329.28; 365.13–370.22). The use of any of those expressions to describe what a proposition signifies is thus a kind of category mistake: applying at the level of propositions what is only proper at the level of nouns and verbs.

Abelard's notion of a *dictum* is taken up by his immediate successors, whose interest in it concerns especially its metaphysical status. One of the more prominent discussions of the *dictum* occurs in the anonymous *Ars Burana*, whose author argues that the *dictum* (or, equivalently, the *enuntiabile*) is neither a substance nor an accident, but belongs to a category outside of the Aristotelian categorical schema, which that author calls the *praedicamentum enuntiabilium*, that is, the category of the *enuntiabile* (de Rijk 1967: 208–209, f. 113v–f, 114r).

Sui generism seems to have fallen out of fashion for much of the thirteenth century, but it is revived in the fourteenth century, first by Ockham's student, Adam Wodeham (d. 1358), and subsequently by Gregory Rimini (d. 1358) —who was clearly influenced by Wodeham's work—and others in Paris.³⁵ Reflecting Abelard's distinction between naming and saying, Wodeham argues (1990: d. 1, q. 1) that asking what (*quid*) is signified by a proposition is ill-formed, for the significate of a proposition is not a “something” (*quid*) but rather a “being something” (*esse quid*). This “being something” is what Wodeham calls the total significate of the proposition. Wodeham's insights are adopted by Rimini, who calls the total significate of the proposition a *complexe significabile*, or something signifiable in a merely complex way. Unlike Wodeham, however, Rimini suggests that the question “what is the significate of a proposition?” is perfectly apt, for that significate is indeed something (*aliquid*), at least in a certain sense. If, as Wodeham seems to suggest, we were to restrict the sense of “something” to substances and accidents, then it is right to say that a proposition signifies nothing, or not something. Restricting that notion in this way limits its scope to existing things. But, Rimini argues, the sense of “something” can be more general, so as to include not just existing things but also whatever can be signified, whether complexly or incompletely, truly or falsely. In that more general sense of “something,” then, a *complexe significabile* is itself something—even though it cannot be reduced to any of the standard Aristotelian categories (1979: prol., q. 1, a. 1–2).

Modism. Like sui generists, modists argue that the significate of a proposition is not some thing or collection of things falling with the Aristotelian categories. Unlike sui generists, however, who argue that the significate of a proposition is entirely distinct from things within the categories, modists maintain that a proposition signifies a mode of a thing (*modus rei*), where a mode of a thing is not really distinct from that thing which it modifies. Notable modists include Richard Billingham (fl. 1350s), Nicole Oresme (d. 1382), and Albert of Saxony (d. 1390).

Modists emphasize that propositions always contain a syncategorematic element, namely, the copula. Traditionally, syncategoremata were said to be consignificative, that is, significative only when paired with some categorematic expression(s). Moreover, when paired with categorematic expressions, syncategoremata were said to signify not a thing but rather a disposition (*dispositio*) of a thing.³⁶ Modists draw from this tradition, arguing that propositions signify not things (or at least, not just things) but rather a certain mode of them.

Perhaps the most interesting account of modism was developed by Richard Billingham. Known to us only through Richard Brinkley's criticisms of the view, Billingham's view is that the significate of a proposition is not a thing but rather a mode of a thing. He draws an analogy to adverbs, which he argues do not signify things but rather "ways" of things (Brinkley 1988: 52–73). Billingham suggests there are a number of benefits to his view. First, unlike a thing, which exists at a particular place, the mode of a thing exists not in one place but rather in every place, all at once. But the truth or falsity of a proposition is not restricted to one place; a true proposition is true wherever it is formed. And so modes, which are everywhere, accommodate spatial concerns about truth. Second, the significates of certain propositions—such as the proposition that a chimera does not exist—cannot be things, since, for example, there are no chimeras. But since propositions must signify something, what they signify must thus be a mode of a thing (a mode, presumably, possessed by some or all the things that do exist).

Modism was likely never a popular position in medieval philosophy, as evidenced by the fact that some of the most prominent accounts are known to us only via their critics.³⁷ But it represents an interesting attempt to reconcile, in a way, the *reist* and *sui generis* approaches to the problem of the signification of the proposition. On the one hand, it accepts with the *sui generis* that the Aristotelian categories cannot handle the kind of complexity required of the significate of a proposition. On the other hand, it attempts to link discussions of propositional significates to the categories, by suggesting that, while not reducible to things in the categories, the significates of propositions are supervenient upon them.

I will end with a brief mention of what seems to me to be at stake, philosophically, in disputes about the signification of the mental proposition. One must always be cautious in making generalizations about debates in medieval philosophy; disagreements and categories of response in the medieval period rarely match up with conceptual frameworks prevalent today, at least not perfectly. But it does seem that, at least broadly speaking, the debate about the significate of the mental proposition concerns the role of states of affairs in the semantics of the proposition (Cesalli 2012). Nihilists, on the whole, deny that states of affairs are necessary to the semantics of propositions, whereas proponents of the other camps see them as essential. But even among those who regard states of affairs as essential to an articulation of the semantics of propositions, there is still significant disagreement about how to express the metaphysics of states of affairs relative to the Aristotelian background within which those figures were all working.³⁸

Conclusion

It is my hope that this essay has provided a brief introduction to the main issues that arise from medieval philosophical reflection on the proposition. But it has been brief, and the scholarship on this topic is vast. The *locus classicus* for (ancient and) medieval treatments of the proposition—at least in the English-speaking world—is Nuchelmans (1973). This work presents an incredibly thorough treatment of the topics I have covered here, and also nicely articulates how medieval reflection on the proposition is rooted in ancient philosophical traditions—in particular, in Stoicism and Aristotelianism. A sort of summary version of the medieval portion of that work can be found in Nuchelmans (1982).³⁹ A central deficiency of Nuchelmans's works is that it largely ignores thirteenth-century philosophical treatments of the proposition. One can go at least part-ways in rectifying that oversight by consulting Bos (1987). In addition to these works, there is Kretzmann (1970). In this seminal article, Kretzmann argues that the twin notions of signification and supposition provided medieval philosophers with the tools to articulate the sense and reference, respectively, of a proposition—in other words, a complete theory of meaning.⁴⁰

The main drawback to the works just mentioned is simply their age. Scholarship on medieval approaches to the proposition has advanced significantly since the 1970s and 1980s, resulting in

important expansions upon, corrections to, and disagreements with some of the claims developed in those earlier works. One important debate in the last decade, for example, concerns the extent to which Peter Abelard endorses a language of thought. King (2007a) argues that Abelard was the first in the Middle Ages to defend a language of thought. Panaccio (2010) argues that King overstates his case and that it is only with Ockham that we have a clearly compositional approach to mind. Beyond Abelard in the twelfth century, the bulk of recent scholarly attention on our topic has focused on the fourteenth century, and especially on what Susan Brower-Toland calls the “in-house debate” about the objects of judgment that occurred among Ockham, Robert Holcot (d. 1349), Chatton, and Wodeham. An excellent article on the development of Ockham’s theory of judgment is Brower-Toland (2007). In addition to her work on Ockham, Brower-Toland (2006) also provides an important reexamination of Wodeham’s account of the “total significare of the proposition,” arguing that that significare is a fact, or concrete state of affairs, rather than (as some have argued) something like propositional content. For a good account of Parisian developments of Wodeham’s account, and also reactions to those developments, see Conti (2004) and Zupko (1994). And, while it is hard to pinpoint just one important article on Buridan’s approach to the issues covered in this article, Klima (2008) does a wonderful job of laying out the nominalist semantic program in the fourteenth century generally, and of detailing the specifics of Buridan’s program (including his semantics of propositions) in particular.

Finally, while most of the philosophical scholarship on fourteenth-century theories of the proposition in the last three decades has focused on the nominalist tradition, there is a growing community of scholars interested in fourteenth-century realist approaches to the proposition. I’ll conclude by briefly mentioning the scholarship on Walter Burley’s account of the mental proposition. There are, broadly, two current interpretations of Burley’s account: either that Burley takes a nihilistic approach (the interpretation I have articulated above), or that he adopts something like a proto-modistic approach, where the proposition signifies an “aspect” of a thing, which (these scholars argue) he calls a “real proposition.” For a reading of the first sort, see Karger (1996) and Bulthuis (2016).⁴¹ For a reading of the second, see Conti (1992).⁴²

Notes

- 1 For a good introduction to theories of the proposition live today, including the development of the contemporary notion of the proposition from the early analytic tradition onwards, see McGrath (2014).
- 2 More precisely, they mean to discuss *utterances and/or inscriptions* of declarative sentences. That said, utterances receive the most attention in the medieval period, the written language having been seen as derivative upon spoken language. Indeed, many philosophers in the medieval period held that written language signifies spoken language, with only spoken language signifying one’s thoughts.
- 3 Kretzmann (1970) argues that a central confusion in medieval philosophy of language was between what a proposition says and what a proposition means, a confusion encouraged by the synonymous use of the Latin verbs “*dicere*,” to say, and “*significare*,” to signify (or mean), in various medieval debates about the proposition.
- 4 On the origins of “*propositio*,” see Nuchelmans (1973: 118–122).
- 5 Nuchelmans (1973: 118) notes that Apuleius’s list of the types of *orationes* is quite long, including, for example, “vowing, showing anger, hatred or envy, favouring, pitying, admiring, despising, objurgating, [and] repenting.”
- 6 Note that propositions are, in this context, assertoric utterances.
- 7 Boethius’s (1877: 95ff) division of *orationes* is derived from the Peripatetic division of speech (*sermones*) into the *oratio imperativa* (an imperative utterance), the *oratio optativa/deprecativa* (an optative utterance), the *oratio interrogativa* (an interrogative utterance), the *oratio vocativa* (a vocative utterance) and the *oratio enunciativa* (an indicative, or statement-making, utterance).

- 8 Broadly speaking, Boethius uses “*oratio enuntiativa*” and “*enuntiatio*” synonymously with “*propositio*.” On the precise sense of each expression, see Nuchelmans (1973: 131–132).
- 9 Note that this thought is an act of judgment. There are no merely entertained propositional contents on this view. Indeed, in the medieval period, the distinction between force and content will not be introduced until the late thirteenth century, by John Duns Scotus. See n. 35.
- 10 On the Aristotelian context of this view, see Nuchelmans (1973: 134).
- 11 “*Propositio est oratio verum falsumve significans*” (Boethius 1891: 1174B, 1177C).
- 12 “[C]onstituere . . . intellectum” (16b20–22), substituting “*constituere*” for “*constituit*” (Aristotle 1965: 7).
- 13 It should be noted that this is hardly a mere restatement of Aristotle’s position. Aristotle himself only hints that propositions (προτάσεις) are themselves significative when he writes that “‘goatstag’ signifies something, but not, as yet, anything true or false—unless ‘is’ or ‘is not’ is added” (*De Interp.* 16a16–18). However, as Nuchelmans notes, one can find historical antecedents for Boethius’s claim. In particular, Ammonius “makes rather frequent use of it [i.e. the signification of the proposition] in his commentary on *De interpretatione*” (1973: 133).
- 14 Interestingly, Walter Burley—often a vociferous critic of Ockham—has a similar view about the relationship between categorematic expressions in natural language and concepts. Yet he accepts that propositions in natural language signify mental propositions, precisely because he holds that mental propositions are composed of things. On Burley’s theory of the relationship between natural and mental language generally, see Spade (2007: 142–145). For his theory of the relationship between propositions in natural and in mental language, see Karger (1996).
- 15 For an analysis of whether Boethius’s view constitutes a commitment to a language of thought, see Suto (2012: 77–113).
- 16 Just as—if not more—influential in the development of medieval philosophy of mind was Augustine. For example, the notion of a mental word that is introduced into the medieval theological and philosophical discussion seems to be due especially to the influence of Augustine’s *De Trinitate*.
- 17 The combinatorial approach to thought can be traced back to the Aristotelian claim that “truth and falsity concern combination and separation. So names and verbs by themselves—for instance, ‘man’ or ‘white’ when nothing is added—are like the thoughts that are without combination and separation” (*De Interp.* 16a11–16; see also *DA* 430a26).
- 18 On Abelard’s account of thinking, see Nuchelmans (1973: 142–143).
- 19 For example, John Buridan argues that mental propositions are simple qualities of the mind, lacking syntactic structure. But Buridan makes a distinction between the metaphysical (or syntactic) complexity of a mental proposition and its semantic complexity. On that division, and Buridan’s account of the semantic complexity of simple mental qualities, see Klima (2004: 423–426).
- 20 The notion of a mental proposition (“*propositio mentalis*” or “*propositio in mente*”) also emerges at this time.
- 21 There is a considerable disagreement in the scholarship over the nature of Ockham’s semantics of mental language—in particular, whether it is atomistic or holistic. For an atomistic reading, see Panaccio (2004: 53–55). For holistic interpretations, see Dutilh Novaes (2008) and Vaughan (2013: 131–176).
- 22 For an excellent overview of Scotus’s account of mental representation—for that matter, for an excellent overview of medieval approaches to mental representation generally—see King (2007b).
- 23 *Super librum I Perihermeneias*, q. 2, n. 9:

[C]ompositio est illarum rerum, non tamen ut existentium, sed ut intelliguntur, et ideo dicitur veritas, et falsitas circa compositionem et divisionem intellectus, quia illa compositio ab intellectu causatur, et est in intellectu, ut cognitum in cognoscente, non autem ut accidens in subiecto.

(Scotus 1891: 543)
- 24 Burley writes, for example, that

whatever the intellect can put together, or divide from one another, can be parts of speech [*oratio*], and consequently can be a subject or a predicate. But the intellect can put together things [*res*] by asserting that they are the same, and can divide things from another by asserting that they are not the same . . . Therefore, some proposition can be composed of things outside the soul [*res extra animam*].

(Burley 1967: c3rb)
- 25 These differences are likely due to Ockham’s account of natures: for Ockham, there are no common natures *in re* for those *ficta* to be conformal to. On the notion of *ficta* as a nominalist take on Scotus’s account of mental content, see Karger (1996: 218).

- 26 The development of Ockham's account is largely the result of Walter Chatton's criticisms of the *fictum* view. See Chatton, *Sent., Prol.*, q.1, a.1 (1989: 1–8).
- 27 This history is complicated by the abundance of “mixed” theories in the tradition, which attempt to include elements of both. See Nuchelmans (1973: 177–185). Walter Chatton (see *infra*) might be seen as defending a mixed view of a certain sort.
- 28 For the most part, Burley defends a nihilist account. However, in his first literal commentary on the *De Interpretatione*, he does argue that true mental propositions signify what he then calls “real propositions,” which are complex, public entities, having merely objective existence in the mind, which serve as the truth-makers for propositions in mental and natural language. See Burley (1973: 61–62, para. 1.26–1.27). That account is wholly absent, however, in Burley's earlier and later works.
- 29 We might also include Aquinas in this camp, though in this section I focus (except in the case of *sui generis*) exclusively on philosophers active in the fourteenth century. Aquinas argues that the object of judgment can be considered in two ways: in terms of the object known, in which case it is a thing, or in terms of the way in which it is known (namely, in a complex way), and then the object is a mental proposition. See *Summa Theologiae* II-II, q. 1, a. 4 (Aquinas 1952).
- 30 See Buridan (2001: 10–14, tr. 1.1.6; 21–22, tr. 1.3.1). See also Perez-Ilzarbe (2004: 153–181).
- 31 See Scotus (1998: 68, bk. VI, q. 3, nn. 36–39). Giorgio Pini (2004) argues that Scotus is one of the first philosophers in the medieval period to recognize a distinction between force and content; Aquinas, for example, does not appear to recognize it. See *Summa Theologiae* II-II, q. 1, a. 2 (Aquinas 1952).
- 32 Ockham's endorsement of the view is more complicated, as he seems to allow, even in his later works, that mental propositions are the objects of demonstrative knowledge—but only because demonstrative knowledge, on his view, is a reflexive mental act, that is, a second-order mental act directed at a first-order mental act. See Brower-Toland (2007: 100–102).
- 33 See, for example, Burley (1974: 249–250, para. 3.553). It seems probable that Burley was aware of the distinction between force and content early in his career, and it certainly was a distinction with which he would have been familiar during the middle and later portions of his career. It is unclear why he rejects the distinction, but it may have been motivated by concerns that were traditional (it is not a distinction Aristotle would have recognized), psychological (he might regard acts of mere apprehension as simple rather than complex), or philosophical (he might find the relational analysis of belief unmotivated)—and perhaps it is a combination of some or all of these concerns.
- 34 In fact, Abelard seems to have established at least some of the conceptual framework within which that debate was waged.
- 35 Interestingly, Adam Wodeham and Gregory of Rimini—the two most prominent defenders of *sui generis* in the fourteenth century—seem oblivious to Abelard's view.
- 36 There was a significant debate in the thirteenth century about whether the copula is a syncategorematic term. See, for example, William of Sherwood (1968: 90–93). By the fourteenth century, there appears to be a general consensus that the copula is syncategorematic. See, for example, Burley (2000: 139–145).
- 37 There is always the possibility, of course, that the present scholarship simply does not accurately reflect the popularity of a given position, such as modism, in the debate.
- 38 Alternatively, we might borrow a suggestion from Susan Brower-Toland (2002: 29–32), who argues that the fourteenth-century debate about the “object” of judgment within Ockham's circle is to some extent a non-debate, since many of the relevant positions can be seen as responding to different questions about the nature of belief. Along those lines, we might see nihilistic accounts as centrally concerned with the content of a propositional attitude, reist accounts with what the attitude is about, and *sui generis* accounts with what the attitude is directed toward (assuming that there is some difference between the aboutness and directedness of a propositional attitude, though this is an assumption which Brower-Toland herself does not make).
- 39 Both Nuchelmans (1973, 1982) end with the fourteenth century, but Nuchelmans (1980) covers the remainder of the late medieval period, as well as the renaissance. See also Ashworth (1978).
- 40 But see Dutilh Novaes (2007: 17–46) on recent concerns over associating signification and supposition with sense and reference, respectively.
- 41 For a different account of Burley's nihilism, see Cesalli (2001). According to Cesalli, Burley's mental propositions are composed of “immanent, intentional objects,” rather than of things outside of the mind.
- 42 On Conti's view, Burley's mental propositions are composed of subjective features of the mind—concepts, or species—rather than of things outside of the mind. Complicating this issue is the fact that Burley seems to admit of two kinds of mental propositions: one kind composed of concepts, and another composed of things, where both are composed by the mind. For a discussion of the relationship of these two kinds of mental propositions to one another, see Bulthuis (2014: 219–242).

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2

QUALIFICATION

Allan Bäck

In ordinary discourse, people often qualify what they say by appealing to one respect or another of what is being said in order to avoid contradiction. A person may be excellent at basketball but not excellent at ballet; an animal may be a big mouse but not a big mammal. Philosophers too seek to qualify their statements, for the sake of greater precision of theory, or for the sake of avoiding the ignominious *elenchus* of Socrates, or for the sake of pretentiousness, or what have you. For instance, in *Republic* I, Socrates gets Thrasymachus to admit that, although rulers do make mistakes, still the ruler *qua* ruler does not err. But does this qualification, “*qua* ruler,” avoid the contradiction?

Indeed some whole metaphysical systems seem to have been built upon such qualifications, more or less explicitly: Father Parmenides, one hopes; certainly the Cārvāka and the Nyāya and certain Buddhists; perhaps Spinoza with his modes and Hegel with his moments. All of these hold that there is no plurality. Still, they admit that the world of our experience has different, mutually opposed aspects: some people are enlightened; others are not; thoughts about goats differ from thoughts about planets. To explain the diversity it is natural to talk about different *respects* about the world or about our experience.

So it is not surprising that philosophers have given logical analyses of the structure of statements containing qualifications, so as to determine which qualifications are legitimate and which are not, which ones avoid the contradictions of the unqualified statements and which do not. Medieval philosophers are no exceptions. To use a standard example from Christian theology: on the orthodox view of the Incarnation, Jesus is both the Creator God and a human creature. So He is both Creator and creature; hence He is created and not created. Such cases motivated many medieval philosophers, like Aquinas and Scotus, to develop an elaborate logical theory of qualification in order to show doctrines like the Incarnation to be consistent.

A simple declarative statement may be qualified in many ways: by adjectives, by subordinate clauses, by the context of the speech act, by being put into indirect discourse, by a propositional attitude like “it is unlikely that . . .,” and so on. More directly, terms or clauses may be attached adverbially, directly to the statement, like “quickly,” “necessarily,” and “deceitfully.” Following Aristotle, the medievals separated out a particular type of such qualifications that specify the respect in which the predication is asserted to hold, having the general form, “S is P in respect of being M”—often put in terms of “*qua*.” This connective is represented by many expressions in ordinary language, such as “insofar as,” “in virtue of,” and “in the sense that.” Traditionally, a use of this connective was called a reduplication.

Greek Sources

Aristotle himself has a philosophy teeming with such qualifications, often expressed via the “*qua*” locution. He says things like “A doctor builds a house, not *qua* doctor, but *qua* housebuilder, and turns gray, not *qua* doctor but *qua* gray-haired. On the other hand, he doctors or fails to doctor, *qua* doctor” (*Phys.* 191b4–6). Aristotle calls his science of first principles the study of “being *qua* being.” He uses this talk of “*qua*” to signify abstractions that are the subjects of the sciences. More generally, Aristotle takes universals to be abstracted from individuals and not to exist like Plato’s Forms in their own right (*APo.* 81a38–b9; *Phys.* 193b31–5). He describes mathematical objects, “the ultimate abstractions,” by speaking of substances “*qua* planes” or “*qua* indivisibles” (*Met.* XIII.3). Thus, understanding the status of these qualifications has great importance for understanding the philosophy of Aristotle.

Being reflective like other philosophers, Aristotle himself analyzes the logical structure of propositions with such qualifications. Indeed, he began developing what turned into a canonical account of abstraction (Weinberg 1965: 5). He discusses formal properties of such propositions with qualifying phrases not systematically but topically, as the need arose (Bäck 1996: chs. 1–3). Aristotle never clearly gave a general overview of his views on *qua* propositions. However, he did hint that there are two logical types, which came to be called the *reduplicative* and the *specificative* in medieval times. Their difference becomes clear in considering the *secundum quid ad simpliciter* inference:

- (1) S *qua* M is P; therefore S is P.

This inference holds for the reduplicative but not for the specificative type. In the (strictly) *reduplicative* type, the respect introduced by the M term has a predicative relation to the original subject and predicate and sets restrictions on that predication. The original subject S is preserved along with P continuing to be asserted of it. In the *specificative* type, the respect introduced by the M term has another, “mereological” relation to the original subject and predicate, and changes the original predication, so as not to be true of the original subject but of its “part” in varied senses. Aristotle discusses formal features of the reduplicative type in his works on syllogistic, demonstration, and science, while discussing those of the specificative type when dealing with fallacies.

Late Greek philosophy had extensive commentaries on Aristotle where his doctrines were elaborated. Various passages where Aristotle discusses the logical structure of qualification were collated and their doctrine systematized. The medievals, both Islamic and Latin, came to have translations of these commentaries as well as of Aristotle’s works.

Medieval Developments

Although current research is scanty, the Islamic philosophers seemed to focus on qualification as the need arose when dealing with specific issues—in the way that Aquinas or Scotus would develop logical doctrines in their theological or metaphysical discussions. Apart from some commentaries on the syllogistic, there were few separate logical treatises.

Once the Latin medievals had access to Aristotle’s full corpus (the *logica nova*), with the Greek and also with some Arabic commentaries, they too appropriated and elaborated upon Aristotle’s analyses of *qua* propositions. On account of Aristotle’s calling some *qua* phrases “reduplications” in *Prior Analytics* I.38, they called all such propositions containing them “reduplicative”—but then distinguished the strictly reduplicative logical type from other types.

Reduplicative propositions appeared along with exceptives, exclusives, inceptives in that part of logic called “the *exponibilia*,” namely, propositions able to be resolved into simpler and clearer

ones (Ammonius 1897: 217.5–12; Peter of Spain 1964: 1–16, 104). It is plausible that the original motivation for the treatment of the exponible was theological: to get clear on Christian doctrines as in: “all men sin except Jesus”; “God had only one Son”; “the Host began to be the body of Christ”; Christ *qua* God is not a creature, while Christ *qua* man is a creature. (There were antecedents: the Stoics had an elaborate theory of conditionals: hypothetical, disjunctive, and conjunctive.) This work continued in Islamic philosophy (Avicenna 1964). What do such claims mean? What are their truth conditions?

In sum, from Aristotle’s scattered remarks there arose a theory of *qua* propositions, or a theory of reduplication, fully developed by the high Latin medieval period (1250–1350). Although there are of course different philosophers with different views on reduplication in that period, their views overlap a lot, and it makes sense to talk of the rise of a single logical theory of reduplication. For instance, William of Ockham, the nominalist, and Walter Burleigh, the realist, have similar logical doctrines here despite their great metaphysical differences. The similarity of their views is partly due to their using Aristotle’s works as a common reference point: they all heed what Aristotle says about *qua* propositions, and attempt to offer analyses that demonstrate the truth of those *qua* propositions that Aristotle (as well as others in the Aristotelian tradition) asserts and the validity of inferences involving *qua* propositions that he maintains. Rather, they differ mostly on the applications of that logical theory—what we today would call “interpretations of the formal model.”

The Aristotelian Theory of Reduplication: The Old Logic

Islamic and Byzantine philosophers had the full Aristotelian corpus about from the start. The Latin medievals did not (the “old logic”) but came to have it (the “new logic”) in the thirteenth century. That corpus included the Greek commentaries and some Arabic materials. Among the latter were all the literal commentaries of Averroes and many of the more original discourses of Avicenna. However, with the exception of his work on Porphyry’s *Eisagoge* in *Al-Madkhal* (called the *Logica* in the *Avicenna Latinus*), Avicenna’s logical treatises were not translated, so far as we know.

I now present some examples of the logical theory of qualification and its application in Latin medieval philosophy (for the Islamic materials, see Bäck 1996: ch. 4). I shall focus on Peter of Spain (thirteenth century), whose books were used as texts for centuries, and on William of Ockham (fourteenth century).

Even before the Latin medieval philosophers had the full corpus, they had Aristotle’s doctrine of logical fallacies in the *Sophistical Refutations*, including one involving an inference dropping a qualification: the fallacy of *secundum quid ad simpliciter*. The canonical example from Aristotle is:

(2) An Ethiopian is white with respect to his teeth (i.e., has white teeth);
therefore he is white.

(SE 167a7–9)

Commenting upon the doctrines of complex predication, they also considered the reverse inference, of *simpliciter ad secundum quid*.

(3) S is P; therefore S is P *qua* M.

To take an instance from Aristotle’s *On Interpretation* 11:

(4) Socrates is good; therefore Socrates is a good cobbler.

(20b35–7)

Both inferences, of types (1) and (3), were grouped together, under the fallacy of *secundum quid et simpliciter*. In later centuries, the fallacy of accident was considered to be the converse of the fallacy of *secundum quid ad simpliciter*; still later, the names reversed, so as to get the fallacy of accident and the fallacy of converse accident, as seen in many logic textbooks (Versor 1473: 465, col 1; Reisch 1496: II.VII.10–11; Whately 1855: III.12; Copi 1994: 125).

Because the old logic contained most of the texts where Aristotle discusses the fallacy of *secundum quid et simpliciter* but few texts on essential qua propositions, logical theories of specificative qualification arose first already by the twelfth century (De Rijk 1962–1967, vol. I). The qualifications were not yet called “specificative.” Rather they were called *determinations* (William of Sherwood 1995: 96.32–97.2; translation in Kretzmann 1966: 153–154). Following Aristotle, medieval logicians formulated general rules detailing when the determinations could be validly dropped. As the rules depended greatly on the subject matter of the determinations, they were not rules of *formal logic* but of *material logic*.

Peter of Spain mostly codified what Aristotle says in various texts. For instance, he says:

Therefore first note that “in virtue of something” (*secundum quid*) is said in two ways. That in one way “in virtue of something” diminishes its whole, e.g., as “white of foot” diminishes “white” without qualification, and “dead man” “man”. And through such “in virtue of something” [qualifications] the fallacy of *secundum quid ad simpliciter* occurs.

But in another way “in virtue of something” does not diminish its whole, but puts it, and implies it without qualification. E.g., “he is curly in the head; therefore he is curly,” whatever accident that denominates the whole through the part, as curliness which denominates man through the head. And snubness and aquilinity are in the nose alone, and through this it is said that a man is snub or aquiline. And blindness is in the eyes, and through this it is said that a man is blind. And science and virtue are in the soul, as in the subject, and through this a man is said to be wise or to possess virtue, and likewise for any other cases denominating the whole through the part.

But those forms and accidents that are forms and accidents of that whole in such a way that they do not belong to the part only, I say, cannot denominate the whole, unless they are in the whole without qualification. And in such cases the fallacy of *secundum quid ad simpliciter* occurs, since the determination which is made in such in virtue of a part or in some respect diminishes it without qualification.

(Peter of Spain 1972: 157.14–34)

Peter claims that inferences like

(5) Socrates is a dead man; therefore Socrates is a man

are invalid, whereas those like

(6) Socrates is curly-haired; therefore Socrates is curly

are valid.

The source and authority for these inferences lie in Aristotle (*De Interp.* 11; *Phys.* V.1 and IV.3). He himself remarks that the inference depends upon the relation of part to whole, of which he recognizes different types. The medievals then developed and applied this doctrine of parts and wholes, already elaborated upon by Boethius, to the fallacy (1891: 461A–C, 877C, 1188B; cf. De Rijk 1962–1967, vol. I: 278). Peter of Spain does so in discussing the fallacy of *secundum quid ad simpliciter*:

Moreover this fallacy occurs in as many modes as it happens that a determination diminishing it is added to something.

First, in virtue of a diminishing qualified part. E.g., “he is a dead man; therefore he is a man” does not follow since “dead” diminishes the concept of “man.” And “a chimera is conceivable; therefore a chimera is (exists)” (does not follow) for “conceivable” diminishes “is” (*esse*). And “it is a painted animal or painted eye; therefore it is an animal or eye” (does not follow), for “painted” diminishes the concept of these. Moreover Aristotle made those paralogisms in this way: “what is not is conceivable—such as a chimera—therefore what is not is.” And you can similarly construct all the others, such as “what is not a man is a dead man; therefore what is not a man is a man” and “what is not an animal is a painted animal; therefore what is not an animal is an animal.”

Second, in virtue of an integral part. E.g., “an Ethiopian is white with respect to his teeth; therefore the Ethiopian is white.”

Third, in those which are for something (*ad aliquid*). E.g., “riches are not good for the fool or for him who does not correctly use them; therefore riches are not good.” For riches may not be good when considered for something, but still they are good in themselves. And: “an egg is potentially an animal; therefore an egg is an animal.” For every potency is for something, since it is for the act which realizes it.

Fourth, in virtue of place. E.g., “it is good to sacrifice one’s father among the Triballi; therefore it is good to sacrifice one’s father” and “it is good to use a diet in places of sickness; therefore it is good to use a diet.” For it may be expedient there, but still it is not expedient without qualification.

Fifth, moreover, in virtue of time. E.g., “that man fasts at the Fortieth; therefore that man fasts” and “it is expedient for someone to be doctored when he is sick; therefore it is expedient to be doctored”.

(Peter of Spain 1972: 158.11–160.5)

These modes have their antecedents too: Aristotle (*De Interp.* 11; *Met.* 1049a1–2) and medieval ones like the *Dialectica Monacensis* (De Rijk 1962–1967, vol II: 533.13–541.5). Peter also gives examples of the fallacy of *simpliciter ad secundum quid* (see (3) above), but he does not classify those examples into modes (Peter of Spain 1972: 160.21–161.2).

Others like Albert the Great had much more complex theories (1632: 867, col. 2ff; 718, col. 1ff). By the fourteenth century the rules tended to become based on a quasi-formal semantics (Ockham 1974: 831.10–14; 1979: 53–56, 260–275). By then the analysis of scientifically respectable qualifications had arrived too. The task seems to have turned into giving a model semantics of the world where things had their aspects, accidental and essential and then formulating syntactic rules about the inference patterns of the propositions about them. The fallacies continued to be discussed extensively. Yet the general logical theories of qualification focused instead on how the accidental aspects could be handled respectably and soundly.

The Aristotelian Theory of Reduplication: The New Logic

With the advent of the new logic, the Latin medievals also dealt with Aristotle’s treatment of qua propositions in his syllogistic. The qua propositions were not the sophistical specificative ones but the scientifically respectable reduplicative ones. Avicenna, Albert the Great, and Richard Kilwardby among others wrote long commentaries on *Prior Analytics* I.38. They also commented on passages where Aristotle uses these qua propositions to explain the structure of scientific demonstrations. For instance, he claims that “an arbitrary isosceles has its angles equal to two right angles, yet isosceles is not primary, but triangle is prior” (*APo.* 73b38–9). Thus, Aristotle says that triangle is the primary subject for this attribute. Therefore, he feels justified in claiming that

triangle *qua* triangle, or *per se*, has this attribute (*APo.* 73b31). Aristotle says that, since the term, “triangle,” “is not homonymous, and being equal to two right angles belongs to every triangle, it is not triangle *qua* isosceles, but isosceles *qua* triangle, that has such angle” (*APo.* 85b10–13). Thus, “a triangle *qua* isosceles has its angles equal to two right angles” is false, and “an isosceles *qua* triangle has its angles equal to two right angles” is true. Aristotle also says that, when isosceles triangles are shown to have angles equal to two right angles, “the demonstration is not *qua* figure or *qua* primary element, but *qua* triangle” (*SE* 168b2–4). Thus, “a triangle *qua* figure has its angles equal to two right angles” is false, and “a triangle *qua* triangle has its angles equal to two right angles” is true. Here the task for medieval logicians was to give an exposition of such *qua* propositions as these: above all, to give truth conditions for them so as to determine their inference patterns and thus to analyze the soundness of demonstrations.

By the thirteenth century expositions of types of strictly reduplicative propositions had a standard treatment. The *Tractatus De Exponibilibus*, traditionally attributed to Peter of Spain, gives the general approach:

[A] reduplicative expression presupposes that some predicate is in some subject, and denotes that that above which it immediately falls is the cause of that inference.

(*Peter of Spain* 1972: 112.105–107)

This rule states that in a reduplicative “S is P *qua* M” proposition, the M term gives the cause of the predication relation holding between the S and P terms.

Peter is taking “cause” here in a strong, Aristotelian sense: the M term must name one of the four Aristotelian causes for that predication (Peter of Spain 1964: 370). This follows the earlier medieval practice of taking reduplicative propositions as causal hypothetical propositions (Boethius 1891: 835B–D; Abelard 1974: 401.34–402.7).

For instance, in his treatise on syncategorematic terms, Peter of Spain offers a partial analysis of the logical structure of these essential *qua* propositions. He says:

The mode of reduplication is diversified in virtue of the diversity of the causes. And therefore it is said commonly that the reduplication “due to the fact that” has different intensions in virtue of the diversity of causes.

(*Peter of Spain* 1992: 370)

From this Peter gives truth conditions

The third rule is that a reduplicative proposition in which no negation is put is expounded through four affirmative exponents, of which the first affirms the principal predicate of the subject, and the second affirms the *reduplicatum* of the subject, and the third affirms the principal predicate of the *reduplicatum*, and the fourth is a causal proposition, in whose antecedent the expression above which the reduplication falls is predicated, and in whose consequent the principal predicate is predicated. For example, “a man insofar as he is rational is able to weep” is expounded as: “a man is able to weep, and a man is rational, and every rational thing is able to weep, and since [*quia*] something is rational, that thing is able to weep”.

(*Peter of Spain* 1972: 112.110–120)

So this rule explicates reduplicative propositions. Is the whole meaning of such a proposition claimed to be captured in the explication? The explication given suggests so. The rule would then give an equivalence in meaning:

(7) S is P qua M (reduplicative) is synonymous with: S is P, and S is M, and M is P, and since something is M, it is P.

He takes the last condition, “since something is M, it is P” to mean that M is the (formal, final, material, or efficient) cause why S is P.

To handle the qua propositions in ideal Aristotelian demonstration, “cause” must be taken even more strongly, so as to be immediate. That is, the M and P terms need to be commensurately universal, or coextensive, along the lines of Aristotle’s *Posterior Analytics* I.4. Burleigh sees this, which he calls the “negative reduplicative” (Burleigh 1955: 175.30–176.10).

Aristotle allows also for not-so-ideal demonstrations (and syllogisms) where the middle term is not commensurately universal. He allows also for ones that give the cause for the predication in the conclusions and others where it does not (*APo.* I.13). “Cause” might also be taken in a weaker sense, of just giving a reason for the predication. Accordingly, the medievals allowed for both causal and non-causal reduplicative propositions, with various subtypes. The two main sorts can be seen in Ockham:

[I]t must be known that such a proposition can be distinguished by the fact that there can be concomitant or causal reduplication. If the reduplication is concomitant, then four propositions, as if explicating it, are required for its truth: one in which the principal predicate is truly predicated of the principal subject; another in which that above which the reduplication falls is predicated of the principal subject; a third in which the principal predicate is predicated universally of that above which the reduplication falls; the fourth will be a true conditional, from that above which the reduplication falls to the principal predicate, in that way in which a consequence from inferior to superior is said to be good, and in the way in which it is said that from one convertible the other follows. For example, for the truth of “Socrates insofar as he is a man is colored” is required the truth of “Socrates is colored,” and “Socrates is a man,” and “every man is colored,” and “if (he is a) man, (he is) colored,” or “if *a* is a man, *a* is colored.” And since such a conditional is false, therefore the corresponding reduplicative proposition, “Socrates insofar as he is a man is colored” is false likewise, since it indeed has a false exponent.

But, if the reduplication is causal, then, besides the four exponents given above, it is required for the truth of such a reduplicative proposition that that above which the reduplication falls express the cause of what is brought in through the predicate, or that it be that in which the principal predicate is in primarily, or that the principal predicate be in that prior to being in the pronoun demonstrating that for which the principal subject supposes. E.g., by “an isosceles insofar as (it is) a triangle has three etc. [i.e., three angles equal to two right angles]” is denoted that an isosceles has three etc., and that an isosceles is a triangle, and that every triangle has three etc., and that, if something is a triangle, it has three etc., and along with this that the predicate “has three” is verified of triangle prior to being verified of isosceles, in the way that a logician uses “prior” and “posterior,” which are conditions of propositions. Similarly, through “fire, insofar as it is hot, gives off heat” are denoted (the exponents) given above, and therefore it is true. Similarly, “a man, insofar as he has an intellective soul, is capable of knowledge” is true, since, in addition to the four exponents, the intellective soul is the cause of knowledge, and as this extends the name of the cause to some subject, it suffices for the truth of such a reduplicative proposition. But, “a man insofar as he is risible is capable of knowledge” is false, although it is true if the reduplication is concomitant, as the four exponents given above are true.

(Ockham 1974: 290.21–291.57)

In addition to the reduplicative sort of *qua* propositions, Ockham discusses another sort, the “specificative”:

But if the expression is not held reduplicatively but specifically, then it is not required that that to which such an expression is added be the subject for the principal predicate universally, but it is required that that above which the reduplication falls indicate that by reason of which the principal predicate is compatible with [*competit*] the primary subject. For example, if in “fire insofar as it is hot causes heat” the “insofar as” is not held reduplicatively but specifically, it is not necessary that “every hot thing causes heat” be true, but it is required that “hot” indicate the heat through which fire causes heat. Further, causing heat must be compatible with “hot” as more prior and more *per se* than with “fire,” or at least what is the principle of causing (must be compatible in this way). And so for the truth of such a proposition it is required that the principal predicate be predicated of the principal subject and of that to which such a (reduplicative) expression is added, and that that added term be predicated of the principal subject. But it is not required that the principal predicate be predicated universally of that to which such an expression is added, but it is necessary that it indicate that by reason of which the principal predicate truly agrees through predication with the principal subject. And so the following propositions are made true: “Socrates, insofar as he is white, stands out [*disgregat*]”; “Socrates insofar as he has free will sins”; “being insofar as being is the subject of metaphysics”; and so forth. But of the examples there must be no concern.

(Ockham 1974: 295.160–179)

Here, Ockham is separating off a scientifically respectable type of specificative proposition, which I have called the *abstractive* (Bäck 1996). Others, like Scotus and Burleigh, had this type too (Burleigh 1955: 176.19–32). The motivation again came from Aristotelian philosophy. For instance, Aristotle has a science of “being *qua* being.” This science makes statements that hold of beings, real things, “*qua* being” (*Met.* IV.1; XI.3–4). This sort of specificative proposition is not the standard fallacious sort: the *secundum quid ad simpliciter* inference holds. On account of this, I suggest that it be considered “reduplicative” and called *abstractive*.

Moreover, Ockham recognizes what we may call an adverbial temporal logical type of *qua* proposition:

It is necessary also to know that this word, “insofar as” and similarly “in virtue of the fact that,” “under the concept of,” and so forth, are sometimes equivalent in propositions to some adverb of time. Just as one sense of the proposition “dog, insofar as it signifies ‘animal capable of barking’, makes the proposition ‘every dog is an animal’ true,” so “the proposition ‘every dog is an animal’, is not true except when dog stands for ‘animal capable of barking’.” And similarly we say “that image is a man, in virtue of the fact that ‘man’ is taken improperly” is true when “man” is taken improperly.

(Ockham 1974: 295.180–296.188)

Here the “*qua*” expression means just “when” or “so long as,” and it is being reduced as a mere linguistic variant.

So the Aristotelian tradition has marked off two main logical types of *qua* propositions, of the form “S is P *qua* M.” In the (strictly) *reduplicative* type, the respect introduced by the M term has a predicative relation to the original subject and predicate and sets restrictions on that predication. The original subject S is preserved along with “P” continuing to be asserted of it. In the *specificative* type, the respect introduced by the M term has another, “mereological” relation to the original

subject and predicate, and changes the original predication, so as not necessarily to be true of the original subject, at least for many types of parts, but rather of its “part.”

The reduplicative type has the following basic structure:

- (8) [Reduplicative] S qua M is P iff S is M, and M is P, and S is P.

This captures what Ockham says about the (scientific) “specificative” or abstractive, except that it leaves out the condition that the M term be “more prior and more *per se*.” To get that, I suggest the condition that P be an M-type predicate. In this way Socrates qua animal is human, and Socrates qua being is a substance.

The subtypes that have been distinguished for the reduplicative add further conditions on (5): that being M entails being P (“it is necessary that every M is P”), which can be construed causally; that the M and P terms be commensurately universal: M if and only if P (the restrictive); that P be an M-type predicate—that is, “P” falls under (in Frege’s sense) “M.” In short, the qua phrase then explains why S is P, where this explanation can be given a weaker or a stronger causal sense.

Medieval logicians gave more or less explicit truth conditions for all these sorts of reduplicative propositions. I list for them truth conditions that I have given elsewhere (Bäck 1996: 507–522), along with relevant passages in Aristotle, and append some examples that would be accepted in the Aristotelian tradition:

- (9) Every S is P qua M (reduplicative) if and only if:
 $(\forall x)((Sx \rightarrow Mx) \ \& \ (Mx \rightarrow Px)).$ (*APr.* I.38)

The Aristotelian tradition had two main subtypes: one, which I call the restrictive, used in scientific demonstration, where the reason or cause for the predication, given by the M term, should be commensurately universal with the predicate:

- (10) Every S is P qua M (restrictive reduplicative) if and only if:
 $(\forall x)((Sx \rightarrow Mx) \ \& \ (Mx \leftrightarrow Px)).$ (*APo.* I.4–5)

- (11) Every S is P qua M (abstractive reduplicative) if and only if:
 $(\forall x)(Sx \rightarrow (Mx \ \& \ Px))$ and “P” is an M-type predicate.

(*Met.* IV.1)

Some more examples:

- (12) Every isosceles triangle *qua* isosceles triangle has its interior angles equal to 180°. (True reduplicatively and abstractively; false restrictively.)

- (13) Every isosceles triangle *qua* triangle has its interior angles equal to 180°. (True restrictively; reduplicatively and abstractively.)

- (14) The Great Pyramid *qua* geometrical is a triangular pyramid. (True abstractively; false reduplicatively and restrictively.)

- (15) Being *qua* mathematical is quantitative.

(*Ibid.*)

With (fallacious) specificative propositions, the *secundum quid ad simpliciter* inference, “if S qua M is P, S is P,” does not follow (*SE* 5–6). To use Aristotle’s example (2), if the Ethiopian (say, Haile) with respect to his teeth is white (the Ethiopian’s teeth are white), it does not follow that the Ethiopian is white. Here “P,” what is predicated of the original subject S, need not be predicated of S

in the respect specified (M). That is, the predicates of that respect of S need not be predicates of S. If we take the notion of part broadly, as is traditional though not too contemporary (Rickey 1984; Simons 1987), we can think of the respect M as being a part of S. Then the fallacy of composition and division can apply here: what is true of the part need not be true of the whole, and vice versa. So we can give the following analysis of an accidental qua proposition:

- (16) [Specificative] Every S qua M is P if and only if S qua M is a part of S, and everything that is S qua M is P (not that every M is P, but every M of S is P, in a mereological sense of “of”).

This can be formalized, not too informatively as:

- (17) Every S is P qua M (specificative) if and only if:
 $(\forall x)((Mx \ \& \ x \in_i S) \rightarrow Px)$, where “ $x \in_i M$ ” indicates a part-whole relation between x and M.

The semantics for reduplicative qua phrases, “S qua M,” presents no more difficulty than what is needed for analyzing usual predicative sentences, as the analyses given above suggest. The terms there keep their usual reference. Specificative qua phrases however immediately, by themselves, change the reference of the original subject S to some aspect of it, signified by the complex, “S qua M”: “Haile” refers to an individual human being; “Haile in respect to his teeth” refers to Haile’s teeth.

The Aristotelian tradition claims that all qua propositions that are true reduplicatively are true specifically. Strictly, this works only for the more respectable sort, which I have called the abstractive. It does not work for the fallacious specificative type, as it has a change of reference so as to have a different subject. It might be thought to work even there on some part-whole relation. That relation is not properly specificative, though, and does not make a *de re* determination, changing the reference of the whole subject to its part. Still such a relation of part and whole, or belonging-to, was recognized in the traditional doctrine of subjective wholes and parts.

Some Applications

Abstractions with their concomitant talk of “qua” played a large part in medieval philosophy, for better or for worse. For Berkeley it was for worse: “those great masters of abstraction [with all their] manifold inextricable labyrinths of error and dispute” (1710: §17). Indeed, there was a famous *Magister Abstractionum*, whose logical and philosophical writings were read widely during the thirteenth and fourteenth centuries by such as Ockham (Ebbesen 2009: 33).

Despite the protests of Berkeley, who also disliked Newton’s theories on similar grounds, abstraction plays a large role in mathematics and science today—and perhaps an inevitable one in philosophy. The logical theory of qualification makes the abstraction talk more understandable—so the medievals thought.

Thus in metaphysics, Avicenna’s doctrine of the threefold distinction of quiddity (*triplex status naturae*) had a central place in both Islamic and Latin solutions of the problem of universals. He says that a quiddity has three respects: in itself, in *re*, and in the mind (1952: 15.1–16). How to analyze propositions about these respects assumed great importance. Does a quiddity in itself, like Avicenna’s example of “horse *qua* horse” or “horseness,” exist independently of its individual instances, like horses (1960: V.1)? Is horseness individual or universal? Once again, people like Ockham appeal to the logical analysis of the qua phrases.

Again, to resolve contradictions in the doctrine of the Incarnation, Aquinas, Scotus, and others appealed to qua talk. The orthodox position of the Athanasian Creed is that “Christ is perfectly God and perfectly man . . . [and] is equal to the Father with respect to his divinity, but less than

the Father with respect to his humanity” (Denzinger 1967: 18). It was a major task of Christian theology to show how such claims are consistent. To do that well, without begging the question, requires a general theory of the logic of qualification.

Beyond this, logical textbooks and treatises on such topics as insolubles and consequences and obligations dealt with reduplicative sophisms. A standard one, perhaps already to be found in Plato’s *Parmenides*, is: “things insofar as they agree differ” (Peter of Spain 1992: 372–374). Others became more elaborate: “Equivocals, due to the fact that they are equivocal, are univocal” (Peter of Spain 1992: 374); “man *qua* man is the worthiest of creatures” (William of Sherwood 1966: 111–112); “every man insofar as he is dead [*homo mortuum*] is an animal” (Lax 1512: 95 col II). Reduplicative propositions continued to be used in later centuries: by Leibniz to restrict his identity principles and to eliminate relations, by Protestants to refute “Popish” theology, and by Bolzano to explain why Titus as a judge ought not to accept gifts.

Conclusions

Latin medieval logicians distinguished two main logical types of *qua* propositions: the reduplicative and the specificative. These have two main differences: one syntactic, in terms of whether or not the *secundum quid ad simpliciter* inference holds, and, one semantic, according to whether or not the *qua* phrase changes the reference of the unqualified subject term.

To be sure, there are many other types of qualifications. But *qua* phrases have the logical merit of having formal properties. So too there are many types of modalities (what used to be called “tropes”) of a proposition. But modal logic focuses on the few that have formal properties, like “necessary.”

Still, why are there so many logical types of *qua* propositions given? Are the medievals splitting hairs and multiplying entities here? Rather, consider what a logical theory is supposed to do. Descriptively, it seeks to provide analyses of current uses of the sentences under consideration—and there are many uses. Prescriptively, it might claim that certain modes are useful in science, while other modes are not. This is what the medievals were doing—and what goes on today.

Today philosophers, linguists, and others still discuss the structure of qualification. Some people, like Kit Fine and Gerhard Heyer, start from the Aristotelian tradition while developing their theory (Fine 1982; Heyer 1987). Others seem to begin all by themselves—often I think to their peril. For instance, Asher and Landman endorse the inference: “If John as a judge is John, John is a judge” (Landman 1989; Asher 2006). Yet the inference follows only reduplicatively, but then the antecedent is false.

The main medieval points seem still to hold. In particular there are (at least) two logical types of such qualifications, having different syntactic and semantic features. Moreover the truth conditions offered for *qua* propositions of various types, although perhaps needing to be supplemented and modified by linguistic fieldwork, seem better than relying on armchair intuition. Oftentimes, the level of sophistication looks higher in the medieval discussions.

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3

KINDS OF ARGUMENT

Sara L. Uckelman

Introduction

The central methodology in western philosophy from the ancient Greeks until the present day is argumentation. Faced with someone who doesn't hold the same philosophical views as you do, the most expedient way to "convert" them is to give them a good argument for doing so. This emphasis on argumentation falls out of the intrinsically dialectic and multi-agent nature of philosophy in the Greek academic and public spheres, where philosophy, politics, and rhetoric were closely entwined. Philosophy was not merely a single person sitting at home in his armchair but also many people speaking to and interacting with many other people, with opposing views and positions. Thus, a good philosopher was one that was able to convince others of his views, on the best and purest of grounds. (The close relationship between the study of rhetoric and the study of philosophy in ancient Greece is a testament of this.) What counts as the best grounds for persuasion becomes a matter of what argumentative procedures are best, and this itself is a question of what are the best types of arguments, or which kinds of arguments are better than others. What counts as a good argument depends on the context: if all that you care about is persuading your opponent of your views, by any means possible, then you might have more argumentative types at your disposal than if your goal is providing firm epistemological foundations for knowledge. Similarly, if all you care about is winning a debate, you will be able to make use of types of arguments that are not appropriate to use if you're engaged in a cooperative effort directed at truth.

Aristotle discusses all these matters in a number of works, including the *Prior* and *Posterior Analytics*, which discuss syllogisms and syllogistic reasoning (see the section "Syllogistic Arguments" below); the *Topics*, which discusses non-syllogistic reasoning (see the section "Non-Syllogistic Arguments"); and the *Sophistical Refutations*, which focuses on the merely persuasive aspects of argumentation (see the section "Sophistical Arguments"). Some of these texts were transmitted into Latin via Boethius's translations from the early sixth century, while others were introduced in the mid-twelfth century either through the rediscovery of lost translations by Boethius or through new translations by James of Venice (Dod 1982). These texts provided the foundation for the philosophical method in western Europe in the Middle Ages. As a result, in this chapter, we will constantly be referring back to the authority of Aristotle, just as medieval philosophers and logicians did. His distinctions provide us with the means for constructing useful typologies of arguments, and we will use these to guide our tour of the kinds of arguments that occur in medieval philosophy.

Before we begin the tour, it is important to note that we will not be establishing a single typology that exhaustively covers all kinds of arguments. Instead, it is more fruitful to look at

overlapping typologies, such that a single argument type can be described differently according to the focus that a certain typology picks out. We consider three typologies, each of which has a different focus or picks out a different relevant characteristic of the argument:

- 1 The outcome of the argument (the section “Arguments According to Their Outcome”)
- 2 The form of the argument (the section “Arguments According to Their Form”)
- 3 The goal or purpose of the argument (the section “Arguments According to Goal or Purpose”)

Additionally, in this chapter, we focus on a relatively narrow period in medieval philosophy, specifically the thirteenth and fourteenth centuries. This is not because arguments were not used in other periods (quite the contrary, given what we noted above) but rather because these two centuries were the high period of logic in the Middle Ages. Because we are interested in the types of arguments used in medieval philosophy, as opposed to the specific ways in which they were employed, we concentrate on the theoretical development of argumentation, and it is in the thirteenth and fourteenth centuries that we find the most interesting and explicit discussions of the types and properties of arguments, their role and purpose, and their correct and incorrect deployment.

Arguments According to Their Outcome

The first typology we take up comes directly from Aristotle, who in *Topics* I.1 divides arguments into three types: demonstrative, dialectical, and sophistical. Medieval authors picked up on this tripartite division and adopted it. As William of Sherwood explains in his *Introduction to Logic* (c. 1250):

A demonstrative syllogism¹ is one that produces scientific knowledge on the basis of necessary [premises] and the most certain reasons for the conclusion. A dialectical syllogism, however, is one that produces opinion on the basis of probable [premises]. Finally, a sophistical syllogism is one that either syllogizes on the basis of seemingly probable [premises] or seemingly syllogizes on the basis of probable [premises]; in either case it is strictly aimed at glory or victory.

(1966: 69)

Roger Bacon in his *Art and Science of Logic* (mid-thirteenth century) distinguishes these three types of arguments on the basis of the ways in which the premises of an argument are said to cause the conclusion. There are three sorts of causes: (1) a cause of implying a conclusion only, (2) a cause of implying and proving it, and (3) a cause of implying and proving it and of its being (2009: 305). In a dialectical argument, the premises are the cause of both implying and proving the conclusion; in a demonstrative argument, the premises are also the cause of the being of the conclusion. In sophistical arguments, on the other hand, the premises are not causally related to the conclusion in any way except merely apparently.²

This is a typology which divides arguments on the basis of their outcomes, or what it is that the argument proves. Demonstrative arguments produce certain, scientific knowledge. Dialectical arguments are not as strong as demonstrative arguments, but nevertheless, the conclusions arising from them have a degree of stability; they are, for the most part, going to be reliable. Sophistical arguments, on the other hand, because they are based on premises which are only seemingly probable, or which argue in a way which is only seemingly correct but not actually, produce rubbish. They are not a reliable guide to the truth; instead, they are used in circumstances where what is important is merely to win, or, as Bacon puts it, when the arguer “intends to acquire glory and apparent wisdom for himself, [and] he also intends victory over a respondent” (2009: 376).

Demonstrative Arguments

A demonstrative argument is one which produces knowledge; they are the topic of Aristotle's *Posterior Analytics*, which discusses how scientific knowledge and discovery is possible. For Aristotle, scientific knowledge is knowledge "[of] the cause why the thing is, that it is the cause of this, and that this cannot be otherwise" (*APo.* I.2). Despite the fact that William of Sherwood mentions demonstrative arguments in his text, he does not go on to discuss them further, focusing on dialectical/probable and sophistical argumentation instead. Bacon discusses demonstrative arguments and identifies two types: demonstrations *quia* "because" and demonstrations *propter quid* "because of which." The latter is the most basic. A demonstration *propter quid* is "that by which an effect is made known through a cause," and (quoting Aristotle) "from things that are primary, true, and immediate, and are prior to, better known than, and the causes of a conclusion"; for this sort of demonstration, the premises must be not only true but also necessary (2009: 304). A demonstration *quia*, on the other hand, either reason from effect back to cause or from a remote or non-proximate cause to effect (2009: 323). An example of the first is when it is argued that "the planets are near because they do not twinkle" or "a triangle is a plane figure [because] it has three angles equal to two right angles" (2009: 323). An example of the second is "A wall does not breathe because it is not an animal"; in this "not being an animal" is a remote cause of the wall's not breathing. We also see this distinction in John Buridan's early fourteenth-century *Summaries of Dialectic* (2001: 8.2, 8.8, 8.9), and again in the fifteenth century when Gaetanus of Thiene (1387–1465) explains the relationship between different ways in which we use the phrase "to know" and different types of arguments. Gaetanus distinguishes three gradations of knowledge properly speaking, the weakest being "a mental grasp of anything true, and necessary without a danger that the opposite be the case," the next being "a mental grasp of anything by means of a demonstration, be it *demonstratio quia* or *demonstratio propter quid*, be it universal or particular," and the most proper type of knowledge being "a mental grasp of anything acquired by the most powerful demonstration, which is in some way different from a *demonstratio quia*" (Boh 1985: 91). This shows that demonstrations *propter quid* are stronger than *demonstrations quia*.

As a class, demonstrative arguments are the "gold standard." They provide us with utterly reliable conclusions that cannot be disputed. They are the only reliable means of scientific reasoning. In other contexts, where we cannot always be assured of necessarily true and readily evident premises, we must rely on dialectical arguments.

Dialectical Arguments

Dialectical arguments are weaker than demonstrative ones, in that they lead to conclusions which are merely probable, rather than necessarily true; the weakness of the argument stems from the weakness of the premises, and not from any defect in the type of argument itself. As Bacon says:

A *dialectical syllogism* arises from probable propositions because it does not seek necessary things, but things that have the appearance of truth . . . The *probable* is what seems [to be true] to all or to many or to the most notable. What is *probable to all* is that about which neither the crowd nor the wise hold a contrary opinion. What is *probable to many* is that about which the wise hold a contrary opinion.

(2009: 325)

In this view, a dialectical argument can either be a syllogism whose premises are merely probable rather than necessarily true or it can be a non-syllogistic argument whose justification lies in something other than the form of the argument. Both Bacon and Sherwood focus on the non-syllogistic arguments

which derive their justification from something other than the form. Sherwood says that a dialectical argument “is based on probable [premisses], but it derives its probability from [dialectical] grounds” (1966: 69–70). The “grounds” that he refers to are the Latin *loci* (sing. *locus*), the translation of Aristotle’s *τοποι* (sing. *τοπος*), the subject of the *Topics*. We return to topical arguments below in the section “Topical Arguments”, and also in the discussion of disputations (the section “Dialectical Arguments”).

Sophistical Arguments

Sophistical arguments are distinguished from the preceding two types in that they are employed not to obtain actual truth but rather merely apparent truth; as Sherwood says, “the end for which the sophist strives is apparent wisdom; sophistical disputation, therefore, is that by means of which a person can appear wise” (1966: 133), without actually being wise. There are many ways in which an argument can appear to lead to truth without actually doing so, and it is no wonder that Aristotle devoted an entire book to showing how to recognize sophistical reasoning (the *Sophistical Refutations*). The *Sophistical Refutations* were not translated by Boethius but were newly translated in the middle of the twelfth century by James of Venice (Dod 1982), and the introduction of this text into the medieval logical canon was both directly and indirectly responsible for many of the most novel developments in logic not only during the Middle Ages but at any time. The task of teaching fallacies and how to recognize fallacious or sophistical reasoning naturally led to the study of paradoxes—*sophismata* and *insolubilia*—and the influence of the different types of disputations which Aristotle defines in *Sophistical Refutations* I.2 is manifest in the development in the thirteenth and fourteenth centuries of the uniquely medieval type of disputation called *obligationes* (about which see the section “Arguments According to Goal or Purpose”).

Bacon gives a delightful explanation of sophistical arguments, saying that a sophistical argument

gives the appearance of being [a] dialectical syllogism, but it is not, just as in the case of things: objects made of litharge and tin look like silver things, and objects made of brass and things painted with bull-bile seem to be golden.

(2009: 370)

Sophistical arguments come in many kinds; Bacon mentions fallacies, sophistical topics, sophistical syllogisms, paralogical syllogisms, and both truth and apparent paelenchus and elenchus (2009: 377). Robert Kilwardby in the chapter on logic in his *On the Order of the Sciences* (c. 1245–1250) says that there are many different ways a sophistical argument can arise, “for either it does what it should not do, or it does not do what it should” (1988: 272). An example of the former is when “it introduces a false premise or conclusion to produce a wrong state of mind, something reasoning should not do” (1988: 272). Kilwardby distinguishes three ways in which this can happen, again following Aristotle (*Topics* I.1): (i) The argument can err in form (that is, be invalid); (ii) it can err in matter (that is, it is unsound or one of the premises is only apparently readily believable but not actually readily believable); or (iii) it can err in both form and matter (1988: 272).

A sophistical argument, then, is one that apparently leads from truth to truth but doesn’t in fact. This can happen either when the steps used in the argument are only apparently, but not actually, good; in this case, we say that the argument is or contains a fallacy (Aristotle gives a long categorization of different kinds of fallacies in the *Sophistical Refutations*, and many medieval authors take up this discussion). Sometimes, however, every single step in the argument is logically correct, and yet the assumption that the premises are true is not enough to guarantee the truth of the conclusion. Such arguments are arguments from paradoxical or otherwise problematic sentences and were variously called by the medieval philosophers *sophismata* “sophisms” (that is, arguments that a Sophist or one who reasons sophistically would use) or *insolubilia* “insolubles” (though they were not, strictly speaking unsolvable, merely very difficult to solve).

In the fourteenth century, it was quite common for logicians to include separate chapters—or even write distinct treatises—discussing sophisms and insolubles. The types of arguments considered range from the logically deep and difficult to handle ones, such as the Liar paradox, to the merely amusing ones, such as the many medieval arguments aimed at proving someone to be an ass. For a representative view of sophismatic arguments, see the final treatise of Buridan's *Summulae* (2001).

Arguments According to Their Form

An argument is identified as demonstrative, dialectical, or sophistical on the basis of the probity of the conclusion on the basis of the premises. But within each of these three categories, there is a variety of types of argument forms. In this section, we take up a typology of arguments based on their structure.

Syllogistic Arguments

While some medieval authors use “syllogism” and “argument” synonymously, properly speaking syllogisms are a subset of arguments, having a specific form and special properties. A syllogism is, according to Buridan:

an expression in which, after some things have been posited, it is necessary for something else to occur on account of what has been posited, as in “Every animal is a substance; every man is an animal; therefore, every man is a substance”.

(2001: 308)

This definition is almost verbatim from Aristotle, *Prior Analytics* I.1, and variations on it can be found in almost every medieval discussion of syllogisms (cf., e.g., Sherwood 1966: 57; Bacon 2009: 4).

A syllogism is an argument comprising three statements, two of which are the premises and the third of which is the conclusion. Each of the three statements has a subject term and a predicate term, and, taken together, there are exactly three terms that occur in the three statements. The predicate term of the conclusion is called the “major term,” and the premise which contains the major term is called the “major premise.” The subject term of the conclusion is called the “minor term,” and the premise which contains the minor term is called the “minor premise.” The term which appears in both premises but not in the conclusion is called the “middle term.” Kilwardby describes the difference between demonstrative and dialectical syllogisms by saying that the latter have “only a readily believable middle” term, whereas the former have “a necessary middle” (1988: 266–267); in a sophistical syllogism, the middle is merely apparent.

Further constraints are placed on the form of the statements on the basis of whether the syllogism is assertoric, modal, or otherwise, and we consider each in turn.

Assertoric Syllogisms

An assertoric, or categorical, syllogism, is made of categorical statements. A categorical statement is two terms combined with one of the following four copulas:

- a** “All _____ are _____.”
- e** “No _____ is _____.”
- i** “Some _____ is _____.”
- o** “Some _____ is not _____.”

1st	2nd	3rd
M_P	P_M	M_P
S_M	S_M	M_S
S_P	S_P	S_P

Figure 3.1 The three syllogistic figures.

Statements of type (a) and (i) are called “affirmative,” while statements of type (e) and (o) are called “negative”; statements of type (a) and (e) are called “universal,” while statements of type (i) and (o) are called “particular.” Thus, the type of every statement in an assertoric syllogism can be uniquely identified by identifying its quality (affirmative or negative) and quantity (universal or particular).

As noted above, each syllogism is made up of three terms, each appearing in two of the statements. Letting S stand for the minor term, P for the major term, and M for the middle, we can identify three ways in which these terms can be arranged with respect to each other. The middle term can be the subject of one premise and the predicate of the other; it can be the predicate in both; or it can be the subject of both (cf. Sherwood 1966: 60; Buridan 2001: 310–311).³ These ways are called “figures,” and we give schematic forms of the three figures in Figure 3.1.⁴

Each of these figures can be turned into a “mood” by the insertion of a copula to determine the statement-types of the premises and conclusion. An example of a first-figure syllogism with universal affirmative statements is the following:

All men are mortal.
 All Greeks are men.

 All Greeks are mortal.

Four of the first-figure moods were picked out as “perfect,” that is, self-evidently valid and also such that any other valid mood could be proven from one of the perfect ones.

Each valid syllogistic mood was given a name by the medieval logicians; the mood exemplified by the previous syllogism was called “Barbara.” The thoughtful reader will be struck by the fact that “Barbara” contains three “a”s, while the syllogistic mood denoted by this name contains three universal affirmative statements, which were labeled above with “a,” and might wonder if this is mere coincidence. The answer is no. The names of the valid syllogisms contain not only an indication of which types of statements the premise and the conclusion are, but also encode the perfect syllogism from which they should be derived as well as the means of deriving them by means of simple conversion (indicated by “s”), conversion *per accidens* (indicated by “p”), and proof by contradiction or *reductio* (indicated by “c”), along with possibly interchanging the two premises (indicated by “m”). (We cannot go into the details of these conversion rules here, but direct the interested reader to Malink (2013) and McCall (1963) for the full story.) These mnemonic names were put together into a hexameter poem, the earliest extant version of which occurs in Sherwood’s *Introduction* (1966: 66):

Barbara celarent darii ferio baralipton
 Celantes dabit is fapesmo frisesomorum
 Cesare camestres festino baroco
 Darapti felapton disamis datisi bocardo ferison.

A student who memorized this poem along with which figure each mood belonged to had at the tip of his tongue everything he needed to prove all valid syllogisms. As a result, DeMorgan in the nineteenth century called these “magic words . . . words which I take to be more full of meaning than any that ever were made” (1847: 130).

Modal

The syllogisms in the previous section were called “assertoric” because they deal with statements at the level of assertion only. Aristotle’s account of assertoric syllogisms in the *Prior Analytics* is clear and complete, and it is no surprise that it has been the primary focus of commentators for millennia after. However, the assertoric syllogistic was not Aristotle’s primary focus. Rather, the bulk of the *Prior Analytics* (chs. 3, 8–22) is devoted to syllogistics which involve modal statements. A modal statement is one which makes a statement not about truth or falsity (as an assertoric statement does), but rather about necessity, impossibility, possibility, or contingency. Each of these is different “modes” (hence “modal”) or ways that a statement can be: it can be necessary (that is, always true); it can be impossible (that is, always false); it can be possible (that is, it is not impossible); or it can be contingent (that is, neither necessary nor impossible).

Aristotle’s theory of modal syllogisms is deeply problematic (many modern commentators believe it to be fundamentally flawed (Lukasiewicz 1957; McCall 1963); but see Malink (2013) for a rehabilitation). Rehabilitating his theory was an important concern for thirteenth-century commentators on the *Prior Analytics*, and some of the modal syllogistics developed during this period are remarkably sophisticated. Perhaps the best-known account is due to Albert the Great (d. 1280), but his theory was heavily influenced by Robert Kilwardby’s, and Kilwardby (d. 1279) was, in turn, indebted to the Arabic logician Averroës (1126–1198; see Thom 2007).

Extended

Assertoric syllogisms, and modal syllogisms built on the assertoric syllogistic, are quite constrained in the type of statements they can express. For example, the arguments “Every man is an animal, therefore every head of a man is a head of an animal” and “Every human is male or female, every male is mortal, every female is mortal, therefore every human is mortal” cannot be represented in classical syllogistic form. Even the following argument, which is often considered to be the canonical example of an Aristotelian syllogistic, is not a syllogism, strictly speaking:

All men are mortal.
Socrates is a man.

Therefore, Socrates is mortal.

This isn’t a syllogism because neither the minor premise nor the conclusion has the form of one of the four categorical statements.

Medieval authors recognized these shortcomings and developed ways of extending the syllogistic to handle a variety of more complex inferences, such as those involving singular or indefinite propositions (e.g., “Socrates is mortal,” “Man runs,” “A human being is a donkey,” “That stone is irrational”), quantified predicates (e.g., “Some man sees every donkey”), or relational or molecular terms such as in the first two arguments highlighted. In particular, the development of the theory of the “expository syllogism” is one of the genuinely new medieval contributions to logic (Parsons 2014).

Divine

A special class of syllogisms that Aristotle did not discuss at all but which deeply interested medieval logicians are syllogisms concerning divinity, that is, God. Consider the following argument, which many people consider to be a paralogism, rather than a real syllogism:

The Father is God.

The Son is God.

The Father is the Son.

This has the form of a valid (extended) syllogism, but on orthodox trinitarian theology, the first two premises are true while the conclusion is false.

Medieval philosophers took seriously the challenge provided by these arguments and sought to answer the question of why this (apparently) valid argument (apparently) fails. One of the most interesting accounts occurs in an anonymous manuscript written at the end of the fourteenth or the beginning of the fifteenth century (Maierù 1988). In this text, the author introduces a three-fold division of categorical statements on the basis of the type of predication contained: Formal, Personal, or Essential. He then argues that the above syllogism is invalid if the type of predication used in the premises and the conclusion is personal or formal; but if the premises are personal predications and the conclusion is an essential predication, or if all are essential predications, the syllogism is valid. The author even explains why it is that Aristotelian syllogistic theory seems, at first blush, to provide incorrect results when reasoning about the trinity. He says that “Aristotle and the other philosophers, ignoring this special mode of being in divinity, did not consider this special mode of predication and syllogistic reasoning in divine things” (Uckelman 2009: 177). Because Aristotle only admitted statements of formal predication in his syllogistic—because in creation, all predications are formal—his theory did not have the expressive power needed to be able to deal with syllogisms concerning divinity.

Non-Syllogistic Arguments

The syllogistic, as part of the medieval inheritance of Aristotle, rightly occupied a central place in medieval philosophical and logical developments, but as modern logicians know, it does not exhaust the range of possibility for good argumentation. In this section, we look at non-syllogistic arguments, concentrating on two types: topical arguments, which are taken as prototypical of the dialectical category of argument, and the so-called “hypothetical syllogisms,” which are neither (wholly) hypothetical nor syllogisms, but rather a medieval name for what we know as propositional logic.

Topical Arguments

Topical arguments take their name from the *Topics*, and are closely connected to the dialectical reasoning of the section “Dialectical Arguments”. A dialectical argument, per Sherwood, “derives its probability from [dialectical] grounds” (1966: 70), or *τοπιοι*. Topical arguments are thus ones that derive their strength from one of the maxims discussed in the *Topics*.

Such arguments can take many different forms, but for the most part, topical arguments share a close affinity with syllogisms, in that any good topical argument is in principle able to be rehabilitated into a proper syllogism by introducing premises with a suitable middle term. Thus, many topical arguments are best understood as enthymemes, that is, incomplete syllogisms (cf. Peter

of Spain's mid-thirteenth-century *Summaries of Logic* 2014: 199). Enthymemes are incomplete or "imperfect" (to use Bacon's description) because an enthymeme "argues from one proposition actually posited and the other implied" (2009: 300). An enthymeme can be perfected by positing the implied proposition.

Sherwood offers a number of topical arguments and their associated syllogisms. We give just one, as an illustrative example (1966: 85):

The Moors have weapons,

Therefore the Moors have iron.

This argument is justified on the basis of the maxim "if what depends on the matter exists, then that matter exists," and the topical argument can be converted into a syllogistic argument as follows:

All people who have weapons have iron.

The Moors are people who have weapons.

Therefore, the Moors are people who have iron.

Dialectical grounds can be divided into intrinsic, extrinsic, or mediate (1966: 71), depending on the nature of the middle term which is "extracted" in order to turn the topical argument into a syllogistic one:

when the argument is extracted from an internal property of one of the terms of the question, the ground is called intrinsic; when from an extrinsic property, the ground is called extrinsic; when from a mediate property, the ground is called mediate.

(1966: 71)

As a result, topical arguments can be divided into these three categories depending on the nature of the supplementary middle term used to construct a corresponding syllogism. The variety and diversity of the topical maxims mean that dialectical arguments come in many varieties; what ties them all together into a coherent type of argument is their basis on a maxim and the fact that a corresponding syllogism can always be constructed.

Propositional Reasoning

In this section, we turn to what perceptive readers will have noticed as glaringly lacking so far, namely: all of the non-Aristotelian forms of arguments, and in particular arguments whose goodness is grounded in formal validity arising from the propositional structure of the premises and conclusion. The development of propositional logic is one of the distinctly un-Aristotelian developments in medieval logic, and in fact, the "discovery" (for the second time in the history of logic, cf. Martin 1991: 303–304) by Peter Abelard of propositional logic is one of the most significant contributions of medieval logic.

In his *Logica Ingredientibus*⁵ and *Dialectica* (1970), Abelard developed a theory of reasoning that took as its basic building blocks, not terms (as is done in the syllogistic) but propositions or statements. These building blocks can then be combined to make complex statements by means of negation, conjunction, disjunction, and conditionalization. It is because conditionalization was taken as the most important type of argument of this kind (because of the close relationship

between hypothetical propositions and logical consequences) that this branch of medieval argumentation was often known as “hypothetical syllogisms.”

This branch of logic was developed in great detail in the fourteenth century, in treatises *De consequentia* “on consequences,” or as chapters in larger, generalist logic treatises. In these treatises we can find all of the familiar modern rules for propositional arguments, such as “The truth of a conjunctive [proposition] requires that both categoricals be true, and for its falsity it suffices if either of them is false” (Buridan 2001: 62), “For its [a disjunctive proposition’s] truth it is required and is sufficient that one member of it be true, and for its falsity it is required that both its members false” (ibid.: 63), and “The truth of a conditional requires that the antecedent cannot be true without the consequent, hence every true conditional amount to one necessary consequence. Its falsity requires that the antecedent be true without the consequent” (ibid.: 61), all of which are taken from Buridan’s *Summaries*. Other rules express meta-properties of logical consequence that are well-known today, such as the rule that “Whatever is antecedent to the antecedent is antecedent to the consequent” (a statement of transitivity) or the rules of *ex falso quodlibet* and *a verum quolibet*, all found in Burley’s (1325–1328) *On the Purity of the Art of Logic* (1951: 1–2).

Arguments According to Goal or Purpose

The previous two typologies have focused on “argument” as the logician defines the word: a collection of statements that has certain properties. In this section, the typology we introduce brings us back closer to the non-philosophical meaning of “argument,” as a dispute between two (or more) people. While modern logic has lost much of its disputational nature, argumentation was born in a multi-agent setting (cf. the notes above concerning the role of argument in persuasion, and the connection between argumentation and rhetoric), and one of the most unique developments in medieval philosophy was built on this Aristotelian foundation: the logical disputations *de obligationibus*.

In *Topics* VIII.4, Aristotle distinguishes three types of disputations: disputations for teaching and learning (*didactic*), disputations for competitive purposes (*eristic*), and disputations for the sake of practice and experiment (*dialectic*). Eristic disputations involve sophistical reasoning and are directed at glory and victory, rather than truth, as noted above. A didactic disputation takes place between a teacher, who is knowledgeable, and a student, who is not, and the goal of the disputation is to lead the student to the teacher’s knowledge. In a dialectical disputation, on the other hand, the two participants work together to determine the truth of some matter, in a cooperative fashion. For Aristotle, the method of a dialectic disputation is the method of question-and-answer: one person proposes a question, and the other can reply either “yes” or “no,” or by clarifying an ambiguity.

Medieval disputations *de obligationibus* were a special type of disputation, somewhere between dialectic and eristic. There are two participants, an Opponent and a Respondent, and during the disputation the Opponent puts forward propositions that the Respondent may then concede, deny, or remain agnostic about in accordance with certain rules (which he is “obliged” to follow, hence the name). The earliest treatises on these disputations date from the first decades of the thirteenth century and the genre continued to be a part of the logical canon for the next two centuries. Six species can be identified: positing, withdrawing, doubting, institution, petition, and “let it be true that.” Of these, positing was by far the most important, and the one that authors most concentrated on.

Though most authors agreed on the general principles of *obligationes*, there was no unified theory throughout this period. Instead, each author developed his own idiosyncratic theory, depending on the specific species of disputation he recognized and the details of the rules governing them. Nevertheless, we can broadly classify obligational disputations into two types: those which

follow the “old response” rules typified by Burley (1988) and those which follow the “new response” rules typified by Roger Swyneshed, 1330–1335 (Spade 1977). We illustrate the difference between the old response and the new response by considering the species “positing,” the rules for which were generally agreed on.

A positing disputation begins when the Opponent puts forward a contingently false sentence which the Respondent admits. In further rounds of the disputation, the Opponent puts forward statements individually, and the Respondent must:

- Accept the statement if it is relevantly following or irrelevant and true.
- Deny the statement if it is relevantly contradictory or irrelevant and false.
- Remain agnostic if the statement is irrelevant and neither known to be true nor known to be false.

The difference between the old response and the new response lies in how “relevantly following” and “relevantly contradictory” are defined. Under the old response, which we find in the early treatises from the thirteenth century, a statement relevantly follows if it is a logical consequence of everything that has been conceded along with the negations of everything that has been denied so far; it is relevantly contradictory if its negation is relevantly following, and it is irrelevant if it is not relevant in either way. “Relevance,” in the old response, is a dynamic concept, potentially changing with each step of the disputation. This dynamicity introduced counterintuitive outcomes, so Swyneshed modified the definition, and disputations following the new definition came to be known as the “new response.” In the new response, relevance is defined with respect to the initial statement only; a statement is relevantly following if it is a logical consequence of the original statement that the Respondent admitted; it is relevantly contradictory if its negation is relevantly following; and it is irrelevant if neither. This static conception of relevance removed the original issues but brought in problems of its own, problems which we sadly cannot enter into here due to reasons of space (for further info, see Uckelman 2012; Dutilh Novaes; and Uckelman 2016).

Conclusion

These typologies that we’ve provided are not exhaustive, nor have we been able, in this chapter, to discuss every type of argument used in medieval philosophy, nor even yet every type of argument explicitly discussed by medieval philosophers. For example, both Bacon and Peter of Spain divide arguments into four types:⁶ Syllogism, Enthymeme, Induction, and Example (Bacon 2009: 273; Spain 2014: 199); we discussed syllogisms (in the section “Syllogistic Arguments”) and enthymemes (in the section “Topical Arguments”) above, but have covered neither argument by induction nor argument by example. Bacon briefly glosses the former as an argument from singular premises to a universal conclusion (ibid.: 301), while the latter is roughly argument by analogy (ibid.: 302). We have chosen the typologies we have to provide a broad introduction to the various types, and their applications, with the hope to have whet the reader’s appetite enough for her to pursue the matter further.

Notes

- 1 While William here speaks of “syllogism,” he is using the term as a generic word for “argument”; it is not restricted to the categorical Aristotelian syllogism.
- 2 The first case, (a), arises in “skeletal” arguments: ones which have only a form but no matter (content), such as “Every a is b, every c is a, therefore every c is b” (Bacon 2009: 305).
- 3 Sherwood gives us a short poem by which we can remember the arrangement of the figures: “*Sub pre prima, bis pre secunda, tertia bis sub*” (1966: 66), i.e., “In the first, subject and predicate, in the second both predicate, in the third both subject.”

- 4 Medieval and modern commentators have noted that, strictly speaking, there is a fourth figure, where the middle term is the predicate of the major premise and the subject of the minor. Aristotle does not mention this arrangement. Buridan’s explanation for why he doesn’t is as follows:

[a fourth figure] could be posited, but Aristotle did not care to discuss it, for it would not be different from the first figure, except in the order of the premises, and the same conclusion would be inferred in one as in the other, although that same conclusion, which would be direct in the first figure, would be indirect in the fourth, and conversely.

(2001: 311)

(A conclusion is indirect when the minor term is predicated of the major). As a result, the fourth figure is superfluous.

- 5 The *Logica Ingredientibus* has not yet been edited in full; see King (2015) for a list of the partial editions that have been made.
- 6 To these four Kilwardby adds a fifth, “counterinstance” (1988: 268).

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4

MODAL LOGIC

Spencer C. Johnston

The aim of this chapter is to introduce some of the main themes in medieval discussions of modal logic. In particular, this chapter will provide a high-level overview of a number of different aspects of the medieval discussions around modal logic before focusing on one specific account of modal logic, that of John Buridan, and its relationship to Aristotle's modal logic. To do this, I will first outline some of the necessary background, logical terminology, and ideas that are presupposed by the medievals' own analysis.¹ I will then discuss three accounts of the modal operators that can be found in medieval texts: a temporal interpretation of modal expressions, an essentialist interpretation of modal expressions, and a possibility-as-alternative account of modal expressions. I will go on to illustrate how these ideas come together into a complete analysis of modal expressions by looking at how one account (that of the fourteenth-century arts master John Buridan) was developed and comparing it to some of the other accounts of modal logic that one finds in the medieval period.

It was standard in medieval discussions of modality to single out six alethic modal expressions for specific consideration: necessity, possibility, impossibility, contingency, truth, and falsity.² In this chapter, I will limit my attention to the first four modal expressions.³ The reason for this restriction is primarily one of space. A full treatment of truth and falsity would inevitably require a discussion of the medieval sophismata literature in general, and specifically medieval discussions about theories of truth and logical paradoxes, which is well beyond the scope of the present chapter.

My main focus in this chapter will be to look at medieval logic in the scholastic tradition in the high middle ages. Though I restrict myself primarily to the Latin tradition, this is not to suggest that there was not very important and interesting work being done on modal logic in the Arabic or Greek world. For more on Arabic modal logic, see Dutilh Novaes and Read (2016: chs. 2, 3, and 14).

Background and Motivations

The background for medieval discussions about modality in general, and about modal logic particularly, comes from a variety of sources. One important set of sources are the writings of Aristotle, first as translated by Boethius and others, and then obtained through interactions with the Arabic speaking world. Another important source of modal ideas comes through the various theological writings of the early Christian church. As we shall see, a number of the ideas of, for

example, Augustine, come to have important implications for how modality is conceived of in the late thirteenth and fourteenth centuries.

For the more specific sources dealing with logic, the main ancient works that served as the background for medieval logic come primarily from Boethius's translations of Aristotle's *Categories*, *On Interpretation*, and Porphyry's *Isagoge*; Boethius' commentaries on these works and on Cicero's *Topica*; and Aristotle's own logical writings (Knuuttila 2008: 505).

The Latin texts that comment on and work from these sources are sometimes referred to as comprising the *logica vetus*, i.e., the old logic. As Latin authors engaged with the remaining works of Aristotle's *Organon* (the *Prior Analytics*, *Topics*, *On Sophistical Refutations*, and the *Posterior Analytics*) further questions about logic arose. In the context of modal logic, the *Prior Analytics* deserves particular mention, since it includes Aristotle's theory of the syllogism. This discussion raised a number of questions about both the correct interpretation of his theory and its underlying plausibility.

As Latin authors developed their own distinct semantic and logical theories, they entered into the period of the *logica modernorum*, i.e., the logic of the moderns. This is generally considered to have started in the twelfth century, and to have reached its zenith in the fourteenth century.

When one looks at the texts in which medieval discussions of modal logic occur, it becomes clear that these texts were intended to serve a number of different purposes, including being commentaries on the texts of Aristotle and others, textbooks, and independent treatises. These categories are not mutually exclusive, as for instance, Buridan's *Summulae Dialecticae* was both a textbook and a commentary on Peter of Spain's *Summulae Logicales*.

Background Context

From the above-mentioned sources, medieval authors inherited a set of background ideas and terminology that would become standard for their discussions of logic (Dutilh Novaes and Read 2016: 290). For medieval authors, a syntactically categorical proposition can be described as having the following form:⁴

Quantifier, Subject, Copula, Predicate

The copula can take a variety of forms, but for the moment, we will consider only “is” and “is not,” which are called assertoric copulas. Later we will consider how the copula can be modified in modal contexts.

The subject and the predicate were both called the terms of the proposition. Terms could be simple, e.g., “human,” “animal,” or “white,” or they could be complex, where one of the terms is, for example, itself a categorical proposition or a relational expression. Indeed, in some cases (e.g., propositions with oblique terms), it was not always clear which part of a proposition counts as the subject and which part counts as the predicate (Buridan 2015: 128–129).⁵ However, for the purposes of this chapter, we can limit ourselves to cases where the terms in question are either simple or are composed of one term that is in an accusative-infinitive construction.

These propositions are used to state when the subject belongs to “all,” “no,” “some,” or “not all” of the predicate. These are the four possible forms that the quantifier can take in such a proposition. If the quantifier is either “all” or “no” the proposition is said to be universal. If the proposition is either “some” or “not all” the proposition is said to be particular. If the proposition affirms that the subject does hold of the predicate (i.e., it holds for “all” or “some”), then the quantity of the proposition is said to be affirmative. Likewise, if the proposition denies that the subject holds of the predicate, then it is said to be negative.

Square of Opposition

The square of opposition is a diagrammatic way of representing a number of inferential relationships that hold between categorical propositions.

<i>Every A is B</i>	\nleftrightarrow	<i>No A is B</i>
\downarrow	X	\downarrow
<i>Some A is B</i>	\leftrightarrow	<i>Not every A is B</i>

Here we are using the symbol \nleftrightarrow for contrariety, \leftrightarrow for subcontrariety, \downarrow for the relationship of subalternation, and X for contradiction, which should be read as two lines, one from “Every A is B” to “Not every A is B,” and another from “No A is B” to “Some A is B.”

According to Peter of Spain, the relationships of contrariety, subcontrariety, contradiction, and sub-alternation can be defined as follows (2014: 113).

Two propositions, A and B, are contrary if A’s being true entails that B is false.

Two propositions, A and B, are sub-contrary if A’s being false entails that B is true.

Two propositions, A and B, are contradictory if A is false entails that B is true, and that if A is true, then B is false.

B is subcontrary to A if A entails B and not vice versa.

Syllogisms

An important part of medieval logic focused on the validity of syllogisms. The definition of a syllogism goes back to Aristotle, where he states that:

A deduction is a discourse in which, certain things being stated, something other than what is stated follows of necessity from their being so.

(1985: 40, 24b18)

The word “syllogism” itself is a Latinization of the Greek term *sylogismos*, which is here translated as “deduction.” When a proposition does not contain a modal expression or a temporal modifier, it is called an assertoric proposition, and likewise, when a syllogism contains only assertoric propositions, it is called an assertoric syllogism. The medieval understanding of this definition and how to properly interpret it led to a number of interesting and important discussions that are outside the scope of the present chapter.⁶

For our purposes, in this chapter we will use Buridan’s definition of syllogism as the point of departure for our discussion of modal syllogisms. In the *Treatise on Consequences*, he says:

So we want to understand by “syllogism” in what follows only a formal consequence to a single subject-predicate conclusion by a middle [term] different from each of the extremes in the conclusion.

(2015: 115)

The account that Buridan is developing here is situated within a more general framework of logical consequences. In the first book of his *Treatise on Consequences* Buridan had given a general theory and definition of when a consequence is valid and then divided consequences into those

that are formally valid and those that are materially valid. Syllogisms, Buridan is saying here, are a type of formal consequence.

Syllogisms can be organized according to the position in which the subject, middle, and predicate term occur. Using S for the subject term, M for the middle term, and P for the predicate term, we obtain the following three figures:

	<i>First figure</i>	<i>Second figure</i>	<i>Third figure</i>
First premise	$M \times P$	$P \times M$	$M \times P$
Second premise	$S \times M$	$S \times M$	$M \times S$
Conclusion	$S \times P$	$S \times P$	$S \times P$

As many medieval authors observe, there is a fourth figure that is also possible, namely:

	<i>Fourth figure</i>
First Premise	$P \times M$
Second Premise	$M \times S$
Conclusion	$S \times P$

Buridan differs from authors who affirm a distinct fourth figure, however:

But it should be noted that the fourth figure differs from the first only in the transposition of the premises, and that transposition does not permit inferring another conclusion or prevent that inference, but affects whether the conclusion inferred is direct only when in the first figure and indirect in the fourth and vice versa . . . From this it is clear that once the first figure has been explained . . . it will be superfluous to explain the fourth; so Aristotle does not mention it.

(2015: 116)

That is to say, once we notice that the fourth figure relates to the first figure in this way, there is no need for subsequent discussion of it.

The medieval writers on logic used a helpful set of mnemonic devices to aid in the memory of the various valid syllogisms and to encode information about how second and third figure syllogisms are to be reduced to first figure syllogisms.⁷

The mnemonic (here quoted from Peter of Spain 2014: 191) is as follows:

Barbara Celarent Darii Ferio Baralip-ton
 Celantes Dabitis Fapesmo Frisesomorum
 Cesare Cambestres Festino Barocho Darapti
 Felapto Disamis Datisi Bocardo Ferison

Each of the names corresponds to one of the valid syllogism schemata that Aristotle identified under each figure. So, Barbara is the first valid schema under the first figure, and so on. Each of the vowels in these names—“a,” “e,” “i,” and “o”—corresponds to one of the categorical propositions discussed above. Here “a” is a universal affirmative, “e” the universal negative, “i” the

particular affirmative, and “o” the particular negative. As such, the name Barbara is used to pick out the syllogism:

Every B is C
Every A is B
Therefore, every A is C

While Datisi is the syllogism:⁸

Every B is C
Some B is A
Therefore, some A is C

These names are still used in contemporary discussions about syllogisms.

Medieval Modal Logic Background

Having provided the necessary background about assertoric propositions and syllogisms, I can now go on to discuss medieval modal logic.

Syntactically, modal propositions can be obtained by adding a modal expression to an assertoric proposition. This can be done in two ways. The first way is to allow for the copula to be modified by a modal adverb. For example, “is possibly,” “is necessarily,” “is not necessarily,” etc. This allows for the creation of propositions such as “Every human is necessarily an animal” and “Every donkey is not necessarily white.” Some medieval authors refer to this as a divided modal proposition (e.g., Buridan 2015: 95–96).

The other way to obtain modal propositions is to allow for one of the terms in a proposition to be a modal expression. In Latin this was normally done using an accusative-and-infinitive construction, where the modal term is nominative, and what is being modified by the modality is in an accusative-infinitive construction. In practice the copulae in these propositions are usually assertoric. This preserves the structure of the categorical proposition as given above. However, in English translations, such constructions are generally translated using “that” clauses. An example of such a proposition would be “It is necessary that some man is an animal.” Such propositions are sometimes referred to as composite modal propositions. According to Read:

The distinction between a term being divided or composite finds its origins in Aristotle’s *Sophistical Refutations* (see 166a23–38) and was an extremely important distinction from Peter Abelard onward. The distinction is similar to the modern distinction between a term being read *de re* or *de dicto*, although the medieval distinction is broader in its use.

(Buridan 2015: 30)

Turning to syllogisms, a modal syllogism is a syllogism where at least one of the propositions is modal. In some parts of the modern literature the syllogistic mnemonic is extended by the use of the letters L, M, Q, and X, which stand respectively for necessity, possibility, contingency, and assertoric (i.e. no modality present). In such cases, the three letters are usually placed before the syllogism, so LXL Barbara would be the syllogism:

Every B is necessarily C
Every A is B
Therefore, every A is necessarily C

While XLL Barbara would be:

Every B is C
Every A is necessarily B
Therefore, every A is necessarily C

These two syllogisms are of particular importance, as Aristotle famously claimed that the first is valid, while the second is not (see *Prior Analytics* 30a15–30b6). It has often been noted in modern discussions of Aristotle (e.g., McCall 1963: 10–15) just how difficult it is to understand Aristotle’s modal logic.⁹ This difficulty was also appreciated by medieval logicians reading his texts. In general, the systems developed by medieval authors did not match the list of validities and invalidities given by Aristotle, nor did they agree with each other. Unlike the assertoric syllogism, where which syllogisms were valid was a settled issue, the question of what modal syllogisms were valid varied considerably. It will be helpful to look at aspects that contribute to this difference, the various ways medieval authors understood the modal terms, and the ways that medieval authors understood the causes of truth for the various propositions.

Interpreting the Modal Operators

Among medieval authors, one can discern a number of different approaches to thinking about modality in general, and about modal logic in particular. These issues of interpretation sometimes intertwine with the question of which modal syllogisms are accepted or rejected by particular authors. I will focus on three medieval approaches to interpreting the modal operators—namely, temporally, essentially, and with reference to God as securing alternative possibilities. For further discussion of other modal interpretations, see Knuuttila (2008: 505–530).

Temporal Modals

One view about modality that the medievals inherited is the idea that the operations of possibility and necessity should be understood with respect to time. In the classical tradition this issue goes back (at least) to a set of disagreements about modality between the Stoics and the Megarians (see Rescher and Urquhart 1971: 4).

The Stoic idea had been to identify the actual with the things that are currently realized now. For example, “Socrates is actually running” is true just in case Socrates is (at this time) running. Possibility, on this view, is then glossed in terms of being true at some point in the future. That is, “It is possible that *p*” should be glossed as saying “There is some time in the future such that *p*” (see Rescher and Urquhart 1971: 4). Necessity, on this view, is glossed in terms of all times in the future. That is, “It is necessary that *p*” is true if and only if, for all times in the future, *p* holds.

When we come to the medieval employment of this notion, one of the most influential examples of this analysis is found in William of Sherwood’s *Introductiones in logicam* (translated in 1966). Sherwood’s textbook, along with Peter of Spain’s *Summulae*, and (to a lesser degree) Lambert’s *Logica* are important logical manuals from the thirteenth century.

A helpful example of the temporal modal interpretation is found in Sherwood’s discussion of how the term “impossible” can be used. According to Sherwood:

Notice, however, that “impossible” is used in two ways. It is used in one way of whatever cannot be true now or in the future or in the past (*quod non potest nec poterit nec potuit esse verum*); and this “is impossible *per se*” – e.g., “A man is an ass.” It is used in the other way of

whatever cannot be true now or in the future although it could have been true in the past, as if I were to say, I have not walked; and this is impossible *per accidens*.

(1966: 41)

Sherwood then goes on to make the point that a similar analysis applies in the case of the terms “necessity,” “possibility,” and “contingency.” The key point to observe here is that, according to Sherwood, both of the ways to use these modal expressions are connected to time. In particular, we have the *per se* reading:

Impossibly *p* if and only if *p* cannot be true now, or in the future, or in the past.

Necessarily *p* if and only if *p* is true now, in the future, and in the past.

Possibly *p* if and only if *p* is either true now, or in the future, or in the past.

And the *per accidens* reading:

Impossibly *p* if and only if *p* is not true now or in the future.

Necessarily *p* if and only if *p* is true now and true in the future.

Possibly *p* if and only if *p* is either true now or in the future.

The main difference between the two possible ways of reading each of the modal expressions is due to whether the modality is only “forward looking” as in the case of the *per accidens* reading, or if it also includes the past.

Essentialist Modals

A second interpretive tradition, exemplified by the writings of Peter Abelard and Robert Kilwardby, analyzes modalities in terms of the essences or natures of the things under consideration. These essentialist considerations are part of a broader metaphysical framework with roots going back to Aristotle. For our purposes here, it will be sufficient to think of an essence as a kind of “real definition.” The idea comes from Aristotle’s remarks in *Topics* 102a3, where he writes, “A definition is a phrase signifying a thing’s essence” (1984: 169). The idea is then to define necessity in terms of that which is part of the essence of the thing (i.e., part of its real definition), and possibility in terms of that which is not in conflict (i.e., not incompatible) with a thing’s essence.

According to Abelard, the right way to think about a modal proposition, such as “It is necessary that Socrates is a human,” is to think of it in terms of the essential relationships that hold between the terms. In the case of a necessary proposition, the predicate needs to be required by the subject. So, in the case of “Socrates” and “human,” if we look at Socrates’ essence, we will find that human is one of the terms that occurs in the definition, and, as such, being human is part of Socrates’ essence. Hence the necessary proposition is true. In a similar spirit, a proposition of possibility is true if it expresses a relationship that is not repugnant with the essence of the thing. For example, the proposition “It is possible that Socrates is running” is true if running is not incompatible with Socrates’ essence.

It should be observed that, on this reading, essence need not reduce to temporal instances, since it may turn out that things that are possible on this view never occur at any point in time. Abelard illustrates this with the example of Socrates being a bishop. The basic idea is that, for it to be possible that Socrates be a bishop, it does not mean that Socrates must, at some point in time, have been, be, or become a bishop (*contra* the temporal interpretation we discussed previously). Instead, all that is required is that becoming a bishop not be incompatible with the essence that

Socrates has. This illustrates one of the important differences between the two interpretations of the modal expressions.

A similar analysis is given by Kilwardby in his commentary on the *Prior Analytics*. The aim of this work was an exposition and elaboration of the *Prior Analytics*, and so it contains an important analysis of modal propositions. According to Thom:

Kilwardby's basic idea is that in order for a proposition to be necessary, it is not enough that it be true and be incapable of not being true; rather, the proposition has to state an essential and inseparable cause of the predicate inherence or non inherence in the subject (2016; *Lectio* 40: 162). By "an essential and inseparable cause of inherence," Kilwardby understands the *per se* predications mentioned at *Posterior Analytics* I.4, 73a35ff (Kilwardby 2016; *Lectio* 9: 458). In the case of affirmative propositions, the necessary is that which is contained in the what-it-is, the essence, of the subject, as a part or an essential difference of that essence. In the case of negatives, it is what is excluded by the essence of the subject. In either case, necessity is grounded in the Aristotelian notion of essence.

(2016: 361)

Modalities as Alternatives

The final way to interpret modalities that we will consider in this chapter is the idea of modality as expressing what is within the power of God to bring about. This analysis is closely associated with John Duns Scotus, although its theological origins go back at least to Augustine, if not to the biblical authors (Knuuttila 2008: 517).

The starting place for this conception of modality is Augustine's account of creation. The relevant parts for our discussion are summarized by Knuuttila as follows:

Augustine argued that God simultaneously created the first things and the seminal reasons for later things out of nothing. The creation was based on an eternal free act of God's perfectly good will, and took place through his omnipotence. In Augustine's Trinitarian view, the Son is a perfect image of the Father and, as the Word, the seat of the ideas of finite beings which in a less perfect manner can imitate the highest being. The ideas refer to possible actualization in the domain of mutability. In this sense the possibilities have an ontological foundation in God's essence. This became the dominating conception of theological modal metaphysics until Duns Scotus departed from it.

On Augustine's view, the act of creation is an action that God did bring about, but was not required or necessitated to bring about. Likewise, the world, on this view, is not necessary, but contingent. What developed, on subsequent reflection, was the idea that modality could be seen as a choice between different, alternative ways things could be brought about. For example, it was within the power of God to create the world, but it was also within the power of God to refrain from creating the world.

(2008: 517)

In its simplest form, this view would become:

It is possible that p just in case it is within the power of God to bring about p .

It is necessary that p just in case it is not within the power of God to bring about not- p .

In the twelfth century, these ideas were further developed, distinguishing between, e.g., natural necessity and unrestricted necessity, which was used to draw out the idea that although the natural world

and its laws are contingent, it does still have a rule-like nature, such that things happen or fail to happen in accordance with how the laws are set up. However, these patterns in nature are not absolute, they are themselves created by God, who can, in principle, overrule such laws. This in turn led into interesting theological discussions about God's relationship to the created world, like questions about the relationship between human choice and the divine will.

Under the influence of Duns Scotus, these ideas were further transformed into the idea that God acts by choosing between different alternatives. According to Scotus:

I do not call something contingent because it is not always or necessarily the case, but because the opposite of it could be actual at the very moment when it occurs.

(Knuuttila 2008: 550, citing Scotus's *Ordinatio* 1.2.1.1–2, 86)

In this definition of contingency, we find a rejection of the traditional thesis of the necessity of the present.¹⁰ What is new in Scotus's analysis was how he formulated the foundations of these modalities. In the Augustinian tradition, the source of modality was to be found in God's essence. In contrast, Scotus argued that God, in his omnipotence, does not turn to his essence in order to understand what is possible, but instead possibilities are known by God in themselves. Indeed, they would still be possible even if God did not exist.¹¹

This led Scotus to draw a number of distinctions in modality. A proposition was called *logically possible* if its description did not involve a contradiction. According to Scotus, God has knowledge of all of these possibilities, and among these possibilities God chooses to actualize some, while not actualizing others. Those that are actualized by God obtain their own being, while the possibilities that are not actualized remain ideas in God's mind. Thus, the world is "put together" out of various compossibilities by God. Two beliefs are compossible if the conjunction of those beliefs is possible. Likewise, impossibility, on Scotus's view, is just impossibility between the various ideas.

Systems of Modal Logic

It will be helpful to conclude this chapter by looking at an actual system of medieval logic, to give a flavor for how these systems function and how they relate to one another. In order to do this, we will start by looking at relationships between the various modal expressions, given by a modal "square of opposition." We will then look at Buridan's single premise inferences and his account of the modal syllogism.

Relationships between Modal Expressions

As we have already discussed, there are four main modals that medieval authors focused on in their treatment of modal logic; namely necessity, possibility, contingency, and impossibility. It would be helpful, then, to look at how medieval authors understand the relationships that existed between these terms, and modifications of these terms with negations. Thirteenth-century logical texts often discuss this in a manner similar to how the square of opposition was illustrated for categorical propositions.

Peter of Spain (2014: 125–126) groups the modal expressions into the following four groups of equivalent propositions:¹²

I	II
Possibile est esse (is possible to be)	Possibile est non esse (is possible to not be)
Contingens est esse (is contingent to be)	Contingens est non esse (is contingent to not be)
Non impossibile est esse (is not impossible to be)	Non impossibile est non esse (is not impossible to not be)
Non necesse est non esse (is not necessary not to be)	Non necesse est esse (is not necessarily to be)

III	IV
Non possibile est esse (is not possible to be)	Non possibile est non esse (is not possible not to be)
Non contingens est esse (is not contingent to be)	Non contingens est non esse (is not contingent not to be)
Impossibile est esse (is impossible to be)	Non impossibile est non esse (is not impossible not to be)
Necesse est non esse (is necessary not to be)	Necesse est esse (is necessary to be)

As the reader can verify, the first group deals with propositions that are equivalent to ones of possibility, while the fourth group deals with propositions of necessity and their equivalents. Groups II relates propositions that are non-necessary, while group III corresponds to propositions of impossibility.

Peter then goes on to discuss the relationships of contrariety, subcontrariety, contradictory, and sub-alternation between these different groups. According to Peter the relationship looks like the following:

IV	\nleftrightarrow	III
↓	X	↓
I	\leftrightarrow	II

Notice that the relationships given here are very similar to those given in the square of opposition. As an illustration of this table, we can tell that a proposition like “Some A is necessarily B” (which belongs to group IV) is contrary to “Some A is necessarily not B,” contradictory to “Some A is not necessarily B,” and superaltern to “Some A is possibly B.”

Singular Inferences

In discussing singular inferences, it will be helpful to narrow our focus to the account given of divided modal propositions by Buridan in his *Treatise on Consequences*. In this text, Buridan focuses on the four modal propositions we have been discussing, although for our purposes here we will focus primarily on divided propositions containing the expressions “necessarily” and “possibly.” Buridan outlines the causes of truth for these different propositions by employing a theory of supposition. Supposition is the relationship that different terms have to objects and it was standard to distinguish three kinds of supposition, namely, personal, material, and simple. A term has personal supposition if it supposits for the things it picks out. The idea behind personal supposition is that “a term, when it occurs in a proposition ‘stands for’ [*supponit pro*] each member of a certain class of things and the truth conditions are stated in terms of the relationship between these classes” (Hughes 1989: 93–94). A term has material supposition if it supposits for the term itself. For example, in “Socrates has 8 letters,” the term “Socrates” has material supposition. A term has simple supposition if it supposits for the universal, as in “Human is a species,” or “Animal is a genus.”¹³ In what follows we will only be making use of personal supposition.

What is notable about Buridan’s account of divided modal propositions is that, on his analysis, the subject term is *ampliated*. The basic idea of ampliation is that the supposition of the term is extended to range over more things than its grammatical structure would initially suggest. In the fourteenth century, this was often employed to treat terms like “dead.” In a sentence like “A is B,” a common fourteenth-century analysis would say that this is true if there is at least one presently existing thing that A and B both supposit for. However, in a sentence like “Socrates is dead,” there is no *presently existing* thing that “Socrates” stands for. The medieval way around this was to posit

that terms like “dead” amplified their subject. In the case of dead, it amplified its subject to the past, so that the conditions for “Socrates is dead” to be true are “Something that is or was Socrates is dead.” This in turn can be true, since we can pick out Socrates in the past, and observe that he no longer exists.

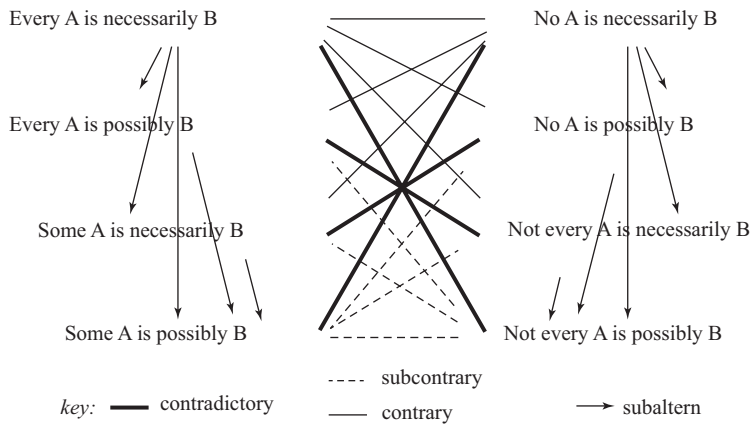
In the case of modal propositions, Buridan requires that the subject of such propositions be amplified not to what is past, but to what is possible. As such, Buridan gives them the following analysis:

Proposition	Conditions
Every A is possibly B	Everything that is or is possibly A is possibly B
Some A is possibly B	Something that is or is possibly A is possibly B
No A is possibly B	Nothing that is or is possibly A is possibly B
Not every A is possibly B	Not everything that is or is possibly A is possibly B
Every A is necessarily B	Everything that is or is possibly A is necessarily B
Some A is necessarily B	Something that is or is possibly A is necessarily B
No A is necessarily B	Nothing that is or is possibly A is necessarily B
Not every A is necessarily B	Not everything that is or is possibly A is necessarily B

In each case, while there is no explicit modality included in the proposition, the subject is amplified to the possible. In fact, the table can be further simplified by observing that in the subject the disjunction “that is or is possibly” can be simplified to “is possibly,” since Buridan accepts the inference “if p then possibly p .” Here we can also see one place where Buridan differs from other authors. In particular, the choice to have the subject of a necessity proposition be ampliative is a rejection of the analysis that Ockham gave in his *Summa*.

Modal Octagon

As before, we can visually represent the relationship between the various propositions that Buridan treats. In this case, we need to extend the square of opposition into an octagon of opposition.



Modal Syllogism

In his *Treatise on Consequences* Buridan’s analysis of the modal syllogism comes at the end of the work. The *Treatise* is divided into four books, with the first treating consequences between propositions

generally, the second single premise inferences between modal propositions, the third treating syllogisms (the third book is further divided into two parts, the first treating categorical syllogisms with simple terms, the second treating syllogisms with oblique terms), and the fourth and final book providing a systematic discussion of modal syllogisms, ending with some remarks about reduplicative propositions. Buridan's account of the modal syllogism, and the syllogism in general, is very much centered within his broader discussion of consequences. For example, Buridan defines a syllogism as a formal consequence that has a particular kind of form (2015: 115–116). A full description of the validities in Buridan's modal system is documented by Read in (2015: 41).

For our comparisons here, we will focus only on the validities of first figure syllogisms, reproducing below a partial version of Read's table. The modality in each of the columns corresponds to the major premise in the argument, while the modality in each of the rows gives the modality of the minor premise. For example, the second row with the first column gives the modality of the premises of a major of necessity and a minor of possibility. Note that Buridan only considers modal syllogisms that have an underlying assertoric form that is valid, e.g., Barbara or Darapti. When only a modality is listed below, this means that all of the assertoric syllogisms are valid with this modal combination. If only some syllogisms are valid, then the modality will be given first, and then the name of valid syllogism given. A pattern with no validities will be left blank.

Buridan's valid first figure modal syllogisms

	<i>Necessity</i>	<i>Possibility</i>	<i>Assertoric</i>	<i>Contingency</i>
Necessity	Necessity	Necessity, Possibility, Assertoric – Celarent	Necessity – Darii, Ferio Assertoric – Barbara, Celarent	Necessity, Possibility, Assertoric – Celarent
Possibility	Possibility	Possibility	Possibility – Darii Ferio	Possibility
Assertoric	Possibility, Assertoric – Celarent		Assertoric Possibility – Darii Ferio	
Contingency	Possibility, Contingency	Possibility, Contingency	Contingency – Darii Ferio	Contingency

It is interesting to observe that Buridan differs from Aristotle on the validity of a number of syllogisms. Focusing just on the necessity and assertoric components will illustrate this. According to Aristotle the following syllogisms are valid (the table is adapted from Malink 2006: 117).

Aristotle's valid first figure modal syllogisms

	<i>Necessity</i>	<i>Assertoric</i>
Necessity	Necessity	Necessity
Assertoric		Assertoric

Notice here that Buridan's system is weaker than Aristotle's with respect to the Necessity–Assertoric moods. While Aristotle accepts that validity of all the Necessity–Assertoric–Necessity syllogisms (see *APr.* 30a17–30b1), Buridan only accepts the validity of Necessity–Assertoric–Necessity Darii and Ferio (i.e., only the syllogisms that conclude to a particular conclusion, not to a universal). However, Buridan does allow for Necessity–Assertoric Barbara and Celarent to be valid, just

not to a conclusion of necessity, but only to one that is assertoric. Given what has been said, one might be tempted to think that Buridan's reasons for doing this is to keep his treatment of the modal syllogism as close to Aristotle's as possible while retaining the analysis of modal proposition that Buridan argues for in his *Treatise on Consequences*. However, there is no suggestion of this in the text of the *Treatise*. For example, the conclusion where Buridan treats Necessity-Assertoric-Necessity Barbara and Celarent is extremely brief and contains no references to Aristotle at all.

Conclusion

Our aim in this chapter has been to introduce basic ideas of medieval modal logic. To that end we have looked at three different ways that medieval authors thought about modal expressions and then looked at how medieval logic treated syllogistic arguments with modal terms. As this brief and incomplete survey has hopefully shown, there was a considerable plurality of views about the right account of modal logic, and disagreements about how to understand the modal operators. However, there is much in the medieval literature on this topic that has not been discussed. Our focus has been only on four modal expressions. We provided no discussion of medieval theories of truth and falsity. Likewise, while six modal expressions were the regular focus of medieval authors, they were well aware of other kinds of modalities, e.g., epistemic or deontic modals. See Boh (1993) for discussion of epistemic modal expressions, and Uckelman (2009) for Anselm's logic of agency. The discussion here has been almost entirely "pure" in the sense that it focused only on the accounts of modal logic themselves, not what kinds of arguments someone might want to make using these kinds of valid modal arguments. For example, absent above is any discussion of how various modal notions were employed or made use of outside of logic. In particular, theological discussions about (say) divine foreknowledge and freedom, or what is within the power of God to bring about, are deeply connected to the interpretations discussed here, but we did not delve into them here. Likewise, one finds discussions of the function of modality in medieval texts dealing with themes like fortune and chance, or about the creation of the world. Again, discussion of this has been omitted here, for reasons of space. Nevertheless, the topics presented in this chapter will hopefully enable the reader to begin to situate themselves in the world of medieval modal logic and to find the issues or topics that are of interest to them.

Notes

- 1 In doing this, a number of simplifications are necessary. In particular, the presentation of the syllogism in this chapter standardizes and simplifies the presentation of the syllogism, and does not reflect the questions regarding how a syllogism should be defined.
- 2 See, for example, William of Sherwood (1966: 40); Peter of Spain (2014: 119), and Buridan (2015: 95).
- 3 In what follows we will use the term "modal expression" in a broad sense to include the presence of a modal, regardless of the grammatical form it takes in the proposition. This also includes cases where one of the modal expressions is not explicitly present in the expression, but for instance the verb has modal force (e.g., verbs like "can" or "must").
- 4 The order of the subject and predicate given here is the one used by, e.g., Buridan. In the *Prior Analytics*, the placement of the quantifier and the order of the subject and predicate are reversed, so that, e.g., "Every A is B" would be stated as "B belongs to every A." See for example *APr.* 25a14–25.
- 5 As an illustration of this, Buridan uses the example of the proposition "Every bishop's ass is running" (2015: 128).
- 6 As a starting point, the interested reader should consult Dutilh Novaes and Read (2016: ch. 12).
- 7 For more on this, see Peter of Spain (2014: 191).
- 8 In his explanation for the verse, Peter of Spain says that the last word of the third line, and the fourth line, are syllogisms in the third figure. By this we know that *Datisi* is a third figure syllogism.
- 9 However, see Malink (2006, 2013).
- 10 One standard expression of this is: "what is, necessarily is when it is."

- 11 See Dutilh Novaes and Read (2016: fn 167).
- 12 Compare with Aristotle's remarks in *De Interp.* 13, 22a21–31.
- 13 While this was common, Buridan, because of his nominalist metaphysics, argued that simple supposition was an unnecessary distinction.

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5

LOGIC GAMES

JT Paasch

Thirteenth- and fourteenth-century scholastic writers describe a family of logic games they call *disputationes de obligationibus*, or just *obligationes* for short. We could anglicize the name to “disputations of obligation,” but the idea is captured better with something like “games of logical commitment” or “games of logical obligation.” I will call them “obligational games,” or even just “games.”

There are different variations, but all of them are two-player games, where one player puts forward a sequence of propositions to the other player, who must concede, deny, or doubt them, in accordance with the rules of the game. The proposing player tries to trick the other player into violating the rules, while the other player tries not to violate the rules.

The plan of this chapter is as follows. In the first section, I give a brief overview of how the games were played. In the second section, I describe one type of game in detail. In the third section, I discuss the origin and development of the games. In the fourth section, I survey various interpretations of the games. In the final section, I conclude with some pointers for further reading.

The Games

In the thirteenth and fourteenth centuries (and beyond), scholastic thinkers wrote treatises dedicated to obligational games. Many follow the same format. The author presents their version of the rules for the games, and then they discuss a series of examples involving sophisms. By using sophisms in their examples, the author aims to show that their version of the rules is good enough to handle even such hard cases as sophisms.

Despite the diversity of game variants present in the scholastic texts, from a high level, all of them proceed along similar lines. There are two players, called the opponent and the respondent, and play proceeds in a series of rounds.

- **Round zero**, i.e., the **thesis round** (establishing the thesis).
 - The opponent puts forward a proposition of their choosing. I will call this the thesis of the game.
 - The respondent must concede or deny the thesis (based on the particular rules of the game). If they concede it, the game begins. If they deny it, the game does not start.
- **Round 1**.
 - The opponent proposes another proposition of their choosing.
 - The respondent must concede it, deny it, or doubt it (based on the particular rules of the game).

- **Round 2, 3, and so on.**
 - The opponent can repeat these rounds as many times as they like, each time proposing a proposition of their choosing, which the respondent must concede, deny, or doubt (according to the rules).
- **Final round.**
 - When the opponent has had enough, they call out “*cedat tempus*,” i.e., “time’s up!” or “game over!”
 - The players (and perhaps any onlookers) review the respondent’s responses to determine if they violated the rules at any point. If the respondent violated no rules, they win. If they violated the rules, the opponent wins.

Most of these games have certain structural components in common:

- *Players.* Each game has two players, namely an opponent and a respondent. I will abbreviate these as **O** and **R**, respectively.
- *A thesis.* Each game has a thesis, which I will abbreviate as **Θ**.
- *A thesis rule.* For each game, there is a rule which stipulates whether the respondent should concede or deny the proposed thesis.
- *A concede rule.* For each game, there is a rule which stipulates whether the respondent should concede, deny, or doubt any proposition proposed by the opponent after the thesis.
- *Conceded propositions.* During each game, the respondent may concede some collection of propositions proposed by the opponent. I will abbreviate this collection as **C** (short for “Conceded propositions”).
- *Denied propositions.* During each game, the respondent may deny some collection of propositions proposed by the opponent. Rather than keep these in their own collection, I will just include them in **C** by negating them. For instance, if the respondent denies the proposition “the pope is sitting,” then I will say that the respondent concedes its negation, i.e., they concede “it is not the case that the pope is sitting,” which I will abbreviate as “ \neg (the pope is sitting).”
- *Doubted propositions.* During each game, the respondent may doubt some collection of propositions proposed by the opponent. I will abbreviate this collection as **D** (short for “Doubted propositions”).
- *The context.* At various points during a game, the respondent may need to consult what they believe to be true or false about the real world. I will call this collection of beliefs the context of the game, and I will abbreviate it as **Γ**.

Different types of rules result in different types of games. In the thirteenth and early fourteenth centuries, six main types of games are discussed.

- *Positio.* In a *positio* game, the respondent must concede the thesis if he wants the game to start from it, and then concede any proposition the opponent proposes which logically follows from it. The opponent’s goal is to try to get the respondent to concede inconsistent propositions.
- *Depositio.* In a *depositio* game, the respondent must deny the thesis if he wants the game to start from it. The respondent’s task is then to deny any further propositions the opponent might propose which imply that the thesis is true.
- *Dubitatio.* In a *dubitatio* game, the respondent must treat the thesis as if it is not known whether it is true or false. The respondent’s task is then to deny any propositions the opponent might propose which imply that the thesis is true or false.

- *Impositio*. In an *impositio* game, the opponent proposes that a word or phrase signifies something different than it normally does. For instance, the opponent might propose that the players agree that, for the duration of the game, the name “Socrates” signifies a donkey rather than the man.
- *Petitio*. In a *petitio* game, the opponent proposes that the respondent should always respond in a certain way. For instance, the opponent might propose that the respondent should always concede that Socrates is a donkey, whenever it is proposed.
- *Sit verum*. In a *sit verum* game, the opponent proposes that the players agree that a particular proposition be true for the duration of the game. For instance, the opponent might propose that “The pope is sitting” be taken as true during the course of the game.

During the scholastic period, this list is by no means accepted as standard. In the fourteenth century, some authors reduce the above list of game types to a smaller list, arguing that some of these game types are superfluous or could be reduced to others.

The *Positio* Game

The type of game that is discussed most by both medieval writers and modern scholars is the *positio* game. In this section, I discuss in detail two important versions of the *positio* game that we find in the fourteenth century.

The first is Walter Burley’s version, from the very beginning of the fourteenth century. The second is Roger Swyneshed’s version, from a few decades later. There are other versions besides these two, but a variety of medieval authors consider Burley’s and Swyneshed’s to be the two dominant versions of the *positio* game. Writing a little later in the fourteenth century, Robert Fland even calls Burley’s version the *antiqua* variant and Swyneshed’s the *nova* variant (see Spade 1980).

Burley’s *Positio* Game

Burley published his treatise on *Obligationes* in 1302. For the Latin text, see Green (1963), and for a partial English translation, see Burley (1988).

Modern scholars often consider Burley’s version of *positio* to be the standard variant of *positio* games (e.g., Spade 1982a: 4), and medieval thinkers seem to see it this way too. Scholastic writers after Burley often discuss his view, and some (like Roger Swyneshed) even seem to formulate their own versions in response.

Burley’s version of *positio* can be summarized in the following way (for more detailed descriptions, see Spade 1982a; Stump 1989c; Yrjönsuuri 2001b; Dutilh Novaes 2005).

- *The context*. Burley considers the context Γ to be what the respondent knows about the actual world, although Burley allows the players to explicitly stipulate that certain things are true if they want to make the game more interesting. For convenience, I will pretend that before the game begins, the players always explicitly agree on Γ , i.e., they explicitly enumerate the propositions that the respondent will take to be true during the course of the game (even though in practice this may not always happen).
- *The thesis rule*. The respondent should concede any thesis Θ which is not self-contradictory. In practice, players tend to play with theses which are contingently false, since that makes for a more interesting game.
- *The concede rule*. For any proposition P that the opponent proposes, the respondent must first evaluate P against the collection of propositions C that they have already conceded. If P

logically follows from anything in **C**, then the respondent must concede **P**. If it contradicts anything in **C**, then the respondent must deny it. If **P** neither follows from nor contradicts anything in **C**, then it is inferentially irrelevant. In that case, the respondent must turn to the context **Γ**. If **P** is contained in **Γ**, then the respondent must concede it, if it contradicts anything in **Γ**, they must deny it, and if **Γ** says nothing about **P**, they must doubt it.

- *Winning*. When the game ends, the respondent wins if **C** is consistent. The opponent wins if **C** contains any two propositions that contradict each other.
- *Evaluation*. Answers should be evaluated as if the game takes place at a single (not necessarily determinate) moment of time. Hence, changes in the world over time are not considered. For instance, the proposition “you are sitting” cannot be true in one round of the game because the respondent is then sitting, and then be false in a later round of the game because the respondent is then standing. Instead, the players should evaluate all propositions from a single moment in time (whether the respondent is sitting or not should thus be explicitly fixed by stating it in **Γ**).

I should emphasize that these are rules for Burley’s version of the *positio* game only. Other authors provide alternative rules, as we shall see, for example, with Roger Swyneshed. Also, these rules would look different if we were discussing a different type of game. For instance, if the game at hand were *dubitatio*, the *concede rule* would look quite different.

An Example

Consider a simple example. Suppose the players are students at Oxford. The following table encodes a game that they might play, with explanatory commentary appended below each round.

Round	Opponent	Respondent
[Γ]	Γ = { R is in Oxford, R is a student } The players first establish the context Γ —i.e., a list of the propositions they agree are believed by the respondent R to be true. In this case, it is that R is in Oxford, and R is a student. At this point in the game, R has conceded no propositions, and doubted no propositions, so C and D are empty: <ul style="list-style-type: none"> • C: { } • D: { } 	n/a
[Θ]	I posit that: you are in Rome and you are the pope. Here the opponent O proposes a thesis Θ , namely a conjunction of two things: that the respondent R is in Rome, and that R is the pope. This is contingently false, because R in fact is in Oxford (rather than Rome), and is not the pope. However, it is not self-contradictory, so R concedes it. R has now conceded one proposition, namely the thesis Θ : <ul style="list-style-type: none"> • C: { R is in Rome and R is the pope } • D: { } 	I concede it.
[1]	I propose that you are the pope. In this round, O proposes another proposition, namely that R is the pope. This follows from what R has already conceded in C . After all, if one has conceded a conjunction (i.e., that R is in Rome <i>and</i> that R is the pope), then one must concede each conjunct individually too (e.g., that R is the pope). So R concedes this too.	I concede it.

Now **R** has conceded two propositions, namely the thesis **Θ**, and the proposition proposed here in round [1]:

- **C**: { **R** is in Rome and **R** is the pope, **R** is the pope }
- **D**: { }

[2] **Time is up.** n/a
 At this point, **O** has had enough and finishes the game by calling out “time is up.”
 The winner of this game is **R**, because **R** has kept **C** consistent.

This illustrates basic gameplay. First, there is an initial (at least hypothetical) context round, where the players establish the context of the game. Next, there is a thesis round, where the players negotiate a thesis. If a thesis is accepted, the game begins. Following that, there are subsequently numbered rounds (round 1, round 2, and so on), until the opponent ends the game by calling out “time is up.”

The Respondent Denies the Thesis

As noted earlier, the respondent should deny any thesis that is self-contradictory, in which case the game does not start. Here is an example.

Round	Opponent	Respondent
[Γ]	Γ = { R is in Oxford, R is a student } The players first establish the context Γ.	n/a
[Θ]	I posit that you are in Rome and you are not in Rome at the same time. The opponent O proposes a thesis Θ , namely that the respondent R is both in Rome and not in Rome at the same time. Since this is self-contradictory, R denies it. Thus, the game does not begin.	I deny it.

Notice that since the respondent can deny the proposed thesis, there is some burden on the opponent to be strategic and propose a thesis that has a good chance of being accepted.

The Respondent Loses

If the respondent fails to see a contradiction, they lose. Here is an example.

Round	Opponent	Respondent
[Γ]	Γ = { R is in Oxford, R is a student } The players first establish the context Γ.	n/a
[Θ]	I posit that you are in Rome. The opponent O proposes a thesis Θ , which R concedes. <ul style="list-style-type: none"> • C: { R is in Rome } • D: { } 	I concede it.

[1]	I propose that you are not in Rome. Now O proposes another proposition, which is the opposite of the thesis. R concedes it (perhaps R is daydreaming and not thinking carefully about what they are doing). <ul style="list-style-type: none"> • C: { R is in Rome, $\neg(\mathbf{R}$ is in Rome) } • D: { } 	I concede it.
[2]	Time is up. O ends the game. The players (and perhaps any onlookers) examine C , and they see that R has conceded contradictory propositions. Hence, R loses, and O wins.	n/a

An Irrelevant Proposition

As noted earlier, if a proposed proposition is inferentially irrelevant to **C**, the respondent must evaluate it against the context. Here is an example.

Round	Opponent	Respondent
[Γ]	$\Gamma = \{ \mathbf{R}$ is in Oxford, R is a student $\}$ The players first establish the context Γ .	n/a
[Θ]	I posit that you are in Rome. The opponent O proposes a thesis Θ , which R concedes. <ul style="list-style-type: none"> • C: { R is in Rome } • D: { } 	I concede it.
[1]	I propose that you are a student. Now O proposes that R is a student. This is inferentially irrelevant to C , because it neither follows from nor contradicts anything contained in C . After all, one can be in Rome, whether they are a student or not. Since it is irrelevant, R has to turn to the context Γ to determine if they should concede, deny, or doubt it. The proposition is indeed contained in Γ , so R concedes it: <ul style="list-style-type: none"> • C: { R is in Rome, R is a student } • D: { } 	I concede it.
[2]	Time is up. O ends the game, and R wins, because C is consistent.	n/a

Doubting a Proposition

If the context says nothing about a proposed proposition, then the respondent must doubt that proposition. Here is an example.

Round	Opponent	Respondent
[Γ]	$\Gamma = \{ \mathbf{R}$ is in Oxford, R is a student $\}$ The players first establish the context Γ .	n/a
[Θ]	I posit that you are in Rome.	I concede it.

The opponent **O** proposes a thesis **Θ**, which **R** concedes.

- **C**: { **R** is in Rome }
- **D**: { }

[1] **I propose that the pope is sitting.** **I doubt it.**

Now, **O** proposes that the pope is sitting. This is inferentially irrelevant to **C**, so **R** has to evaluate it against the context **Γ**.

Since the context says nothing about whether the pope is sitting or not, **R** must mark this proposition as one that he does not know and hence doubts:

- **C**: { **R** is in Rome }
- **D**: { The pope is sitting }

[2] **Time is up.** **n/a**

O ends the game, and **R** wins, because **C** is consistent.

Changing Responses

There is nothing to prevent the opponent from putting forward the same proposition multiple times in a game. Moreover, under Burley's rules, the opponent can force the respondent to first doubt a proposition, and then concede it. Here is an example.

Round	Opponent	Respondent
[Γ]	Γ = { ¬(It is raining) } The players first establish the context Γ . In this case, they agree that it is not raining.	n/a
[Θ]	I posit that the pope is sitting or it is raining. O proposes a thesis Θ , which is a disjunction of (i) something unknown (the pope is sitting), and (ii) the opposite of something believed to be true i.e., it is raining, which is the opposite of ¬(it is raining). Since that is not self-contradictory, R concedes it. <ul style="list-style-type: none"> • C: { The pope is sitting or it is raining } • D: { } 	I concede it.
[1]	I propose that the pope is sitting. Next, O proposes that the pope is sitting. This is inferentially irrelevant to C . The only thing contained in C is the thesis Θ , which implies neither that the pope is nor is not sitting (Θ says only that the pope is sitting or it is raining, but it does not say which). So R has to evaluate this against the context Γ . Γ says nothing about whether the pope is sitting, so R must doubt this proposition. <ul style="list-style-type: none"> • C: { The pope is sitting or it is raining } • D: { The pope is sitting } 	I doubt it.
[2]	I propose that it is raining. Now, O proposes that it is raining. This is also inferentially irrelevant to C , for the same reason that [1] was, so R has to evaluate this against the context Γ too. This is false in Γ , so R must deny that it is raining. <ul style="list-style-type: none"> • C: { The pope is sitting or it is not raining, ¬(It is raining) } • D: { The pope is sitting } 	I deny it.

[3]	I propose that the pope is sitting. For the second time, O proposes that the pope is sitting. This time, it follows from C . There are two propositions contained in C : the thesis Θ (which says either the pope is sitting or it is raining), and the negation of [2] (i.e., it is not raining). By disjunctive syllogism, it follows that the pope must be sitting. So, R must concede this proposition, which he doubted before. <ul style="list-style-type: none"> • C: { The pope is sitting or it is not raining, \neg(It is raining), The pope is sitting } • D: { } 	I concede it.
[4]	Time is up. O ends the game, and R wins, because C is consistent.	n/a

Notice that in this game, the respondent first doubts a proposition and then concedes it. In particular, in round [1], they doubt that the pope is sitting, and then in [3], they concede it.

This game pattern can be generalized. The template for any game that follows this pattern has the following shape (where **P** and **Q** are any distinct arbitrary propositions):

Round	Opponent	Respondent
[Γ]	$\Gamma = \{ \neg(Q) \}$	n/a
[Θ]	I posit that P or Q.	I concede it.
[1]	I propose that P.	I doubt it.
[2]	I propose that Q.	I deny it.
[3]	I propose that P.	I concede it.
[4]	Time is up.	n/a

Nevertheless, a change from doubting to conceding is the only way that the respondent can change their response. For under Burley's rules, once a respondent concedes or denies a proposition, they cannot give a different response if it is proposed again (see Spade 1982a; Dutilh Novaes 2005).

Notice that matters are different for other types of games. For example, in a *dubitatio* game, once propositions are placed in **D**, they can never move out of **D**, since *dubitatio* revolves around propositions that are doubted.

Order Matters

The order in which the opponent proposes propositions matters. In the previous game, the respondent was able to first doubt that the pope is sitting, but in the following game, they are not given this chance, because the opponent proposes the propositions in a different order.

Round	Opponent	Respondent
[Γ]	$\Gamma = \{ \neg(\text{It is raining}) \}$ The players first establish the context Γ .	n/a
[Θ]	I posit that the pope is sitting or it is raining. O proposes the thesis Θ , which R concedes. <ul style="list-style-type: none"> • C: { The pope is sitting or it is raining } • D: { } 	I concede it.

[1]	I propose that it is raining. Now O proposes that it is raining. This is inferentially irrelevant to C , for the same reason it was before, so R has to turn to Γ . Since it is false in Γ , R must deny it. <ul style="list-style-type: none"> • C: { The pope is sitting or it is raining, \neg(It is raining) } • D: { } 	I deny it.
[2]	I propose that the pope is sitting. Now, O proposes that the pope is sitting. It follows from C , by disjunctive syllogism, so R must concede it. <ul style="list-style-type: none"> • C: { The pope is sitting or it is raining, \neg(It is raining), The pope is sitting } • D: { } 	I concede it.
[3]	Time is up. O ends the game, and R wins, because C is consistent.	n/a

Granting any Proposition

Under Burley's rules, the opponent can force the respondent to grant almost any arbitrary proposition. Here is an example where the opponent forces the respondent to grant that (say) the pope is sitting.

Round	Opponent	Respondent
[Γ]	$\Gamma = \{ \neg(\mathbf{R}$ is in Rome), R is a student } The players first establish the context Γ .	n/a
[Θ]	I posit that you are in Rome. O proposes a thesis Θ , which R concedes. <ul style="list-style-type: none"> • C: { R is in Rome } • D: { } 	I concede it.
[1]	I propose that you are not in Rome, or the pope is sitting. Here O proposes a disjunction of (i) something believed to be true but which contradicts the thesis (namely, that R is not in Rome), and (ii) something unknown (namely, that the pope is sitting). To evaluate this, R turns to the first disjunct, namely that R is not in Rome. This contradicts the thesis Θ , but that does not mean the whole proposition contradicts the thesis. After all, the second disjunct might be compatible with the thesis. So R turns to the second disjunct, namely that the pope is sitting. This is inferentially irrelevant to Θ , however, and so the whole proposition is inferentially irrelevant. Hence, R must turn to the context Γ . To evaluate the proposition against Γ , R again turns to the first disjunct, namely that R is not in Rome. This is in Γ , and a disjunction must be conceded whenever one of its disjuncts is true, so R concedes the whole disjunction. <ul style="list-style-type: none"> • C: { R is in Rome, \neg(R is in Rome) or the pope is sitting } • D: { } 	I concede it.
[2]	I propose that the pope is sitting.	I concede it.

Now **O** proposes that the pope is sitting. This follows from **C**. For **R** has conceded that (i) either **R** is not in Rome or the pope is sitting, and (ii) that **R** is in Rome. By disjunctive syllogism, it follows that the pope is sitting. So **R** must concede it.

- **C**: { **R** is in Rome, $\neg(\mathbf{R} \text{ is in Rome})$ or the pope is sitting, The pope is sitting }
- **D**: { }

[3] **Time is up.** n/a
O ends the game, and **R** wins, because **C** is consistent.

This game pattern can also be generalized. A game following this pattern will have the following shape (where **P** and **Q** are any distinct arbitrary propositions).

Round	Opponent	Respondent
[Γ]	$\Gamma = \{ \neg(\mathbf{P}) \}$	n/a
[Θ]	I posit that P.	I concede it.
[1]	I propose that $\neg(\mathbf{P})$ or Q.	I concede it.
[2]	I propose that Q.	I concede it.
[3]	Time is up.	n/a

Contradictories in Different Games

Under Burley's rules, an opponent can force the respondent to grant some proposition in one game, and then in another game, they can force the respondent to grant its contradictory. Here is an example (modeled after Ashworth 1993: 370). First, the opponent forces the respondent to grant (say) that the respondent is sitting:

Round	Opponent	Respondent
[Γ]	$\Gamma = \{ \mathbf{R} \text{ is human, } \mathbf{R} \text{ is standing} \}$ The players first establish the context Γ .	n/a
[Θ]	I posit that every human is sitting. O proposes a thesis Θ , which R concedes.	I concede it.
	<ul style="list-style-type: none"> • C: { Every human is sitting } • D: { } 	
[1]	I propose that you are a human. Here O proposes that R is a human. Since this is irrelevant, R turns to Γ , where it holds, so R concedes it.	I concede it.
	<ul style="list-style-type: none"> • C: { Every human is sitting, R is human } • D: { } 	
[2]	I propose that you are sitting. Here O proposes that R is sitting. This follows from C , so R concedes it.	I concede it.
	<ul style="list-style-type: none"> • C: { Every human is sitting, R is human, R is sitting } • D: { } 	
[3]	Time is up. O ends the game, and R wins, because C is consistent.	n/a

Then, in another game, the opponent starts with the same thesis but forces the respondent to grant the contradictory of what they granted before, namely that they are not sitting:

Round	Opponent	Respondent
[Γ]	$\Gamma = \{ \mathbf{R} \text{ is human, } \mathbf{R} \text{ is standing} \}$ The players first establish the context Γ .	n/a
[Θ]	I posit that every human is sitting. \mathbf{O} proposes the same thesis Θ , which \mathbf{R} concedes. <ul style="list-style-type: none"> \mathbf{C}: { Every human is sitting } \mathbf{D}: { } 	I concede it.
[1]	I propose that you are sitting. Here \mathbf{O} proposes that \mathbf{R} is sitting. This is irrelevant (it has not been conceded that \mathbf{R} is a human, so the proposition “ \mathbf{R} is a human” is not in \mathbf{C}). Hence, \mathbf{R} turns to Γ , where it is false that \mathbf{R} is sitting, so \mathbf{R} denies it. <ul style="list-style-type: none"> \mathbf{C}: { Every human is sitting, $\neg(\mathbf{R} \text{ is sitting})$ } \mathbf{D}: { } 	I deny it.
[2]	Time is up. \mathbf{O} ends the game, and \mathbf{R} wins, because \mathbf{C} is consistent.	n/a

Swyneshead's *Positio* Game

Roger Swyneshead wrote during the fourteenth century (d. 1365), and is not to be confused with the Oxford Calculator Richard Swyneshead. Roger published his treatise on *Obligationes* somewhere between 1330 and 1335. For the Latin text, see Spade (1977), and for the dates, see Weisheipl (1964).

In this treatise, Swyneshead presents his own version of the *positio* game, which differs from Burley's in important ways. According to some, the fact that Swyneshead's rules so exactly contradict Burley's on certain points suggests that Swyneshead probably formulated his rules in reaction to Burley. See, for example, Spade (1982a, 1982b), Stump (1982, 1989d), and Sinkler (1992).

Swyneshead's version of the *positio* game can be summarized in the following way (for more detailed descriptions, see Spade 1982a; Stump 1989d; Yrjönsuuri 2001b; and Dutilh Novaes 2006a).

- *The context.* Under Burley's rules, the context Γ is fixed and does not vary from round to round. By contrast, Swyneshead allows the context to change over time to reflect the actual state of affairs at each round of the game. Hence, for Swyneshead, the context Γ is not a static set of propositions that the players establish before the game begins, but rather a set of beliefs that the players establish (at least hypothetically, though probably not in practice) at each round. Hence, for Swyneshead, Γ is reset/re-established at each round.
- *The thesis rule.* Swyneshead says the respondent should concede any thesis that is contingent, or more exactly, any proposition that can change from being true to false (or vice versa) over time, when evaluated outside of the game.
- *The concede rule.* Under Burley's rules, the respondent must compare each proposed proposition against all propositions they have already conceded. By contrast, Swyneshead says the respondent must compare each proposed proposition only against the thesis Θ . Hence, for Swyneshead, \mathbf{C} is reset at each round, so to speak, and can only be filled with a pair: the thesis, and the proposed proposition (if the respondent concedes it).

- *Winning.* When the game is over, the respondent wins if they have conceded no proposition that is inconsistent with the thesis. If they fail at this, the opponent wins.

Swyneshead's rules give his version of *positio* some interesting properties. I illustrate some of them in what follows.

The Context Changes

As noted a moment ago, under Swyneshead's rules, the context Γ can change from round to round. This means that the respondent can first concede and then deny a proposition, due to changes in the context. Here is an example.

Round	Opponent	Respondent
[0]	$\Gamma = \{ \mathbf{R} \text{ is sitting} \}$ I posit that you are in Rome. \mathbf{O} proposes a thesis Θ , which \mathbf{R} concedes. During this round, \mathbf{R} is sitting, which is reflected in the context Γ . <ul style="list-style-type: none"> • $\mathbf{C}: \{ \mathbf{R} \text{ is in Rome} \}$ 	I concede it.
[1]	$\Gamma = \{ \mathbf{R} \text{ is sitting} \}$ I propose that you are sitting. \mathbf{O} proposes that \mathbf{R} is sitting, which is irrelevant to Θ , so \mathbf{R} turns to the current context Γ . There \mathbf{R} is sitting, so \mathbf{R} concedes it. <ul style="list-style-type: none"> • $\mathbf{C}: \{ \mathbf{R} \text{ is in Rome, } \mathbf{R} \text{ is sitting} \}$ 	I concede it.
[2]	$\Gamma = \{ \mathbf{R} \text{ is standing} \}$ I propose that you are sitting. In the last round, \mathbf{R} was sitting, but in this round \mathbf{R} is now standing (which is reflected in the current context Γ). Here \mathbf{O} proposes that \mathbf{R} is sitting, and since that is irrelevant to Θ , \mathbf{R} must turn to Γ . But during this round, it is false in Γ that \mathbf{R} is sitting, so \mathbf{R} denies it. <ul style="list-style-type: none"> • $\mathbf{C}: \{ \mathbf{R} \text{ is in Rome, } \neg(\mathbf{R} \text{ is sitting}) \}$ 	I deny it.
[3]	Time is up. \mathbf{O} ends the game. \mathbf{R} wins, because \mathbf{R} conceded no proposition that contradicts the thesis Θ .	n/a

Notice that at each round, the context Γ is updated to reflect the current state of the world. In round [1], the respondent is sitting, which is reflected in the context during that round. Then at round [2], things change. The respondent stands up, and the context for that round is updated to reflect that.

Notice also that the set of conceded propositions \mathbf{C} gets reset at each round. At each round, all previously conceded propositions are removed from \mathbf{C} , except for the thesis. So at each round, the respondent is responsible for considering whether the proposed proposition follows only from the thesis (not from any other previously conceded propositions).

Notice finally that during the game, the respondent granted both that they are, and are not, sitting. Under Burley's rules, this would mean the respondent failed, since respondents are evaluated on the whole set of propositions that they concede in the game. Not so under Swyneshead's rules. Under Swyneshead's rules, \mathbf{C} is reset at each round, and so the respondent's answers are evaluated separately at each round. In the round [1], \mathbf{C} is consistent, and then separately, in round [2], \mathbf{C} is again consistent.

The Order Does Not Matter

As noted earlier, under Burley’s rules, the order in which the opponent presents their propositions to the respondent matters. This is not so for Swyneshead’s rules. At each round, the respondent concedes an inferentially relevant proposition only if it follows from the thesis alone, so they will always answer the same, no matter what order it comes in. Inferentially irrelevant propositions are similar: the respondent concedes them if they hold in the context, so for such propositions, the respondent will also always answer the same (in the same context), no matter what order it comes in. Consider the following game, played by Swyneshead’s rules.

Round	Opponent	Respondent
[Θ]	$\Gamma = \{ \neg(\text{It is raining}) \}$ I posit that the pope is sitting or it is raining. O proposes a thesis Θ, which R concedes.	I concede it.
[1]	$\Gamma = \{ \neg(\text{It is raining}) \}$ I propose that the pope is sitting. O proposes that the pope is sitting, which is irrelevant to Θ, so R turns to Γ, which says nothing about it. Hence, R doubts it.	I doubt it.
[2]	$\Gamma = \{ \neg(\text{It is raining}) \}$ I propose that it is raining. O proposes that it is raining, which is irrelevant to Θ, so R turns to Γ. There it is false, so R denies it.	I deny it.
[3]	Time is up. O ends the game. R wins, because R granted nothing that contradicts Θ.	n/a

The respondent must doubt the proposition “the pope is sitting” when it is proposed in round [1]. This would be so under Burley’s rules too.

Now consider the same game (again played by Swyneshead’s rules), but with rounds [1] and [2] presented in reverse order.

Round	Opponent	Respondent
[Θ]	$\Gamma = \{ \neg(\text{It is raining}) \}$ I posit that the pope is sitting or it is raining. O proposes a thesis Θ, which R concedes.	I concede it.
[1]	$\Gamma = \{ \neg(\text{It is raining}) \}$ I propose that it is raining. O proposes that it is raining, which is irrelevant to Θ, so R turns to Γ. There it is false, so R denies it.	I deny it.
[2]	$\Gamma = \{ \neg(\text{It is raining}) \}$ I propose that the pope is sitting. O proposes that the pope is sitting, which is irrelevant to Θ, so R turns to Γ, which says nothing about it. Hence, R doubts it.	I doubt it.
[3]	Time is up. O ends the game. R wins, because R granted nothing that contradicts Θ.	n/a

This game is played by Swyneshead’s rules, and we can see that the respondent doubts the proposition “the pope is sitting” when it is proposed in round [2], just as they did before when it was presented in round [1].

However, if the players played with Burley’s rules, the respondent would have to concede this proposition in round [2], since they would have to consider both the thesis Θ and the proposition they granted in round [1]. Under Swyneshead’s rules, however, the respondent can ignore round [1], so that they respond to the proposition in the same way they did before, no matter which round it is proposed in.

Granting the Conjuncts but Not the Conjunction

Under Swyneshead’s rules, the opponent can force the respondent to grant two conjuncts but not their conjunction. Here is an example.

<i>Round</i>	<i>Opponent</i>	<i>Respondent</i>
[Θ]	$\Gamma = \{ \neg(\mathbf{R} \text{ is in Rome}), \mathbf{R} \text{ is sitting} \}$ I posit that you are in Rome. \mathbf{O} proposes a thesis Θ , which \mathbf{R} concedes.	I concede it.
[1]	$\Gamma = \{ \neg(\mathbf{R} \text{ is in Rome}), \mathbf{R} \text{ is sitting} \}$ I propose that you are sitting. This is irrelevant to Θ , so \mathbf{R} must turn to Γ . There it is true, so \mathbf{R} concedes it.	I concede it.
[2]	$\Gamma = \{ \neg(\mathbf{R} \text{ is in Rome}), \mathbf{R} \text{ is sitting} \}$ I propose that you are in Rome and you are sitting. Now, \mathbf{O} proposes the conjunction of Θ and [1]. This conjunction is irrelevant to Θ . A conjunction will follow from a thesis only if both conjuncts follow from it. But here, Θ does not imply the second conjunct, namely whether \mathbf{R} is sitting. So, this conjunction does not follow from Θ , and hence it is irrelevant. Consequently, \mathbf{R} must turn to Γ , where the first conjunct is false, and so \mathbf{R} denies it.	I deny it.
[3]	Time is up. \mathbf{O} ends the game. \mathbf{R} wins, because \mathbf{R} granted nothing that contradicts Θ .	n/a

Notice how the respondent concedes that they are in Rome (in the thesis round), and that they are sitting (in round [1]). But then, when the conjunction of the two is proposed in round [2], the respondent must deny it.

Granting a Disjunction but Not the Disjuncts

Swyneshead’s rules let the opponent force the respondent to grant a disjunction, and then deny both of its disjuncts. Here is a simple example.

<i>Round</i>	<i>Opponent</i>	<i>Respondent</i>
[Θ]	$\Gamma = \{ \neg(\mathbf{R} \text{ is in Rome}), \neg(\mathbf{R} \text{ is sitting}) \}$ I posit that you are in Rome or you are sitting. \mathbf{O} proposes a thesis Θ , which \mathbf{R} concedes.	I concede it.

[1]	$\Gamma = \{ \neg(\mathbf{R} \text{ is in Rome}), \neg(\mathbf{R} \text{ is sitting}) \}$ I propose that you are in Rome. \mathbf{O} proposes that \mathbf{R} is in Rome. This is irrelevant to Θ , because Θ implies neither that \mathbf{R} is, nor is not, in Rome (Θ says only that \mathbf{R} is in Rome or is sitting, but it does not say which). Hence, \mathbf{R} must turn to the context Γ , where it is false, so \mathbf{R} denies it.	I deny it.
[2]	$\Gamma = \{ \neg(\mathbf{R} \text{ is in Rome}), \neg(\mathbf{R} \text{ is sitting}) \}$ I propose that you are sitting. Now, \mathbf{O} proposes that \mathbf{R} is sitting. This is irrelevant to Θ , for the same reason that [1] was. Hence, \mathbf{R} must again turn to Γ , where it is false, so \mathbf{R} must deny it.	I deny it.
[3]	Time is up. \mathbf{O} ends the game. \mathbf{R} wins, because \mathbf{R} granted nothing that contradicts Θ .	n/a

Notice how the respondent first concedes a disjunction (proposed as the thesis), but then they deny each of the disjuncts in successive rounds.

The Development of the Games

Treatises on obligational games survive from the thirteenth and fourteenth centuries (and beyond). If you look in the modern scholarship, you may come across a fairly common description of the development of this genre which runs as follows. Burley's treatise represents the "standard" thirteenth- and early fourteenth-century view. Then due to some criticisms from Richard Kilvington and others, a subtle shift in thinking begins, which culminates in the view of Swyneshed. Later medieval writers follow either Burley's or Swyneshed's version, though of course, they alter the rules in a variety of small ways. See Stump (1982), Spade (1982a, 1982b), and Yrjönsuuri (2001b).

The allegedly earliest thirteenth-century treatises on obligational games are edited in De Rijk (1974). These are undated, but De Rijk speculates that they must come from the early part of the thirteenth century. Other extant treatises from the thirteenth century that are worth mentioning include those edited in De Rijk (1975, 1976), and a treatise attributed to Nicholas of Paris (edited in Braakhuis 1998). There is also a treatise attributed to William of Sherwood (edited in Green 1963 and discussed in Stump 1989b), although some believe this text to actually be an early draft of Burley's (see Spade and Stump 1983).

In the fourteenth century, there are of course the treatises of Burley and Swyneshed. But other fourteenth-century treatises that are worth mentioning include the chapters on obligational games in Ockham's *Summa Logicae* (Ockham 1974), a passage in Richard Kilvington's *Sophismata* (1990), and treatises by Richard Lavenham (Spade 1978), Robert Fland (Spade 1980), Richard Brinkley (1995), John of Holland (1985), and Paul of Venice (1988). Ralph Strode's treatise on obligational games is not edited, but it is discussed in Ashworth (1993) and Dutilh Novaes (2006b).

What is the source or original inspiration for the medieval obligational game? It is tempting to look to Aristotle. In the *Topics* books I and VIII, Aristotle describes a dialectical logic game with two players, called the proponent and the opponent. The proponent first poses a thesis, after which the opponent asks a series of questions, with the aim of getting the proponent to grant contradictory propositions that follow from their thesis.

The similarity of Aristotle's games to scholastic obligational games is striking. Unfortunately, it does not seem that scholastic writers paid much attention to *Topics* I and VIII until somewhere in the middle of the thirteenth century, at which point obligational games had already appeared.

So *Topics* I and VIII may not be the direct source of inspiration for these scholastic games. (Of course, once scholastic writers started paying attention to *Topics* I and VIII, they were quick to point out the similarities.)

Some modern scholars suggest that obligational games developed organically as one particular kind of disputation. Medieval universities enjoyed a culture of disputation, with a variety of different disputations forming an integral part of the scholastic academic life. It is natural to think that obligational games emerged in this environment as just one particular kind of disputation. See Stump (1989c), Yrjönsuuri (1993), and Dutilh Novaes and Uckelman (2016).

Others suggest that obligational games developed in close connection with medieval interests in counterpossible reasoning, liar paradoxes, *ex falso quodlibet*, and theories of consequence. See Martin (1992) and Stump (1989d), for example.

It is also worth noting that no written transcripts of these debates survive. This has led some to think that these games were never actually played. Instead, they were imagined exercises, carried out in the minds of medieval logicians (see the introduction to Spade 1977; and Lagerlund and Olsson 2001). However, as Sinkler (1992) points out, later authors like Paul of Venice speak about obligational games as if they did happen (for instance, Paul mentions that they often get disrupted), and this suggests that these games actually were played in the medieval university.

Interpreting the Games

The point or purpose of these games is not clear. Both scholastic writers and modern scholars offer a variety of different interpretations.

Scholastic Interpretations

Scholastic writers themselves offer a number of different reasons for the games. Some say the games are meant as classroom exercises designed to help train students in logic (for example, De Rijk 1975, Paul of Venice 1988, Braakhuis 1998). Alternatively, some authors say these games are meant to be a special technique that can be used to solve sophisms (for instance, De Rijk 1976).

Still others say these games are meant as a kind of tool for proof search: they help the players find logical consequences that follow from some proposed thesis (see De Rijk 1974, 1975, Braakhuis 1998). In fact, some medieval authors even claim that these games are useful for (say) lawyers and ethicists, when they want to figure out what follows when something is imagined to be the case (Kretzmann and Stump 1985).

Modern Single-Agent Interpretations

Modern scholars offer a number of interpretations too. Some propose that these games are primitive axiomatic theories (Boehner 1952). Others follow scholastic writers and argue that these games really are just exercises for logic training (Weisheipl 1966; Perreiah 1982; Sinkler 1992; Ashworth 1993), tools for exploring consequences (Yrjönsuuri 2015), or that they are really meant as a tool for exploring sophisms (Stump 1989d).

Martin (2001) suggests that obligational games aim to evaluate whether a set of propositions can be held together, and the way that a respondent adds more propositions as they proceed in a game is reminiscent of constructing a (partial) possible world or model. Yrjönsuuri (1998) makes a similar suggestion, arguing that a respondent constructs a set of propositions in a game which are logically consistent in a syntactic sense. Alternatively, Yrjönsuuri (1996) claims that obligational games can be seen as thought experiments, where the players construct the experiment world as they play the game (see also King 1991).

An oft-cited but controversial interpretation comes from Spade (1982a), who argues that the *positio* game is a theory of counterfactual reasoning. The notion of counterfactual reasoning that Spade has in mind is this: imagine a counterfactual situation in a world that is otherwise as similar to our own as possible, and then see what follows in that world. In such a counterfactual world, anything that logically follows from the counterfactual situation will hold, but everything else will stay the same as in our world.

Spade sees an analogue in *positio* games. By starting with a context, players begin with a world that is much like our own. Then, they propose a counterfactual statement and grant anything that follows from it. Anything that does not follow from that counterfactual statement stays the same as in our world, through the context.

Stump (1989d) argues that this cannot be right. As we have seen, when the players turn to the context to handle irrelevant propositions, players are *not* in fact obliged to concede things that follow from the thesis. On the contrary, players ignore everything they have conceded, and they answer purely from the context. So this does not look like counterfactual reasoning after all (see also Uckelman 2015a).

Another interpretation from Lagerlund and Olsson (2001) is that Burley's *positio* game can be seen as a theory of belief revision. According to the so-called AGM theory of belief revision (Alchourrón, Gärdenfors, and Makinson 1985), belief revision can be modeled as follows. An agent has a belief set that they are committed to (this includes the beliefs the agent knowingly holds plus all other beliefs that follow logically). Beliefs can then be added or removed from the set. Adding or removing any one belief can cause other beliefs in the set to be added or removed too, in order to keep the belief set consistent and to account for any new things the agent would be logically committed to believing (or not).

Lagerlund and Olsson argue that, in a very similar way, Burley saw his *positio* game as a mechanism for updating an agent's belief set with a new belief. The context is the agent's original belief set, the thesis is the new belief to be added, and the game itself is the procedure that one follows to discover additional new beliefs that should be added to the original belief set, because they follow logically.

Dutilh Novaes (2007) questions this approach. Under the AGM model, updating a belief set with a new belief may involve erasing other beliefs in the original set (e.g., beliefs that are not compatible with the new belief). But this cannot be done across the board in obligational games. Under Burley's *positio* rules, for example, a respondent cannot revise **C**. So an obligational game does not look like a mechanism for revising a belief set after all.

Modern Multi-Agent Interpretations

Dutilh Novaes points out that all of the aforementioned interpretations ignore the game-like character of obligational games. In obligational games, there are two players who follow rules to try and beat each other, and this should be accounted for in any interpretation scholars might want to propose. For Dutilh Novaes, obligational games should be seen as genuine games, in the sense that they are multi-agent interactions governed by rules (see also Uckelman 2012, 2013).

For her part, Dutilh Novaes models an obligational game as a quadruple of the following four pieces: (1) the context (the players' beliefs), (2) the propositions the opponent proposes, (3) the propositions the respondent concedes during the game, and (4) a function that assigns to each proposed proposition a correct response. Such a model grows as a game is played, as new propositions are proposed and conceded.

Dutilh Novaes uses this quadruple to model the games of Burley, Swyneshead, and Ralph Strode (with some modifications to the model to account for these different authors' views—see Dutilh Novaes 2005, 2006a, 2006b). In addition, Dutilh Novaes is able to prove that these games have certain properties. For example, under Burley's rules, the respondent can always win, but the

game is hard, and it is dynamic (Dutilh Novaes 2005). Under Swyneshed's rules, the games have different properties. For example, they are not dynamic (Dutilh Novaes 2006a).

Uckelman (2011a) also insists that obligational games are interactive and game-like. But she argues that other models of these games (like the ones proposed by Dutilh Novaes) are additive, in the sense that they start with a small set of propositions (e.g., the thesis), and they grow as more rounds are added. By contrast, Uckelman wants to capture the opposite sort of progression, since as a respondent concedes more and more propositions during a game, the set of further propositions they can concede gets smaller.

To this end, Uckelman uses a multi-agent variant of dynamic epistemic logic (e.g., van Ditmarsch, van der Hoek, and Kooi 2008) to model the games. The model begins as a large model that represents the comprehensive knowledge of the players about the world. The actions of the players are then encoded as model-reduction operations: for instance, when the respondent concedes a new proposition, all pieces of the model that are no longer compatible are cut out.

One advantage of Uckelman's approach is that she can model a variety of different properties of obligational games. In addition, she can adopt her general-purpose model to handle other types of games (see Uckelman 2013). One interesting case is *dubitatio*, where the respondent aims to keep a particular proposition doubtful (Uckelman 2011b).

Conclusion

Fifty years ago, there was little modern scholarship on these games. Today, there is a growing body of literature, of which I have only scratched the surface. In addition to the references mentioned already, there are a number of introductory surveys on the topic, e.g., Stump (1982), Spade (1982b), Yrjönsuuri (2001b), Dutilh Novaes (2008), Uckelman (2012), and Dutilh Novaes and Uckelman (2016). There are a few book-length studies, e.g., Yrjönsuuri (1994), Keffer (2001), and Dutilh Novaes (2007). There is an extensive bibliography up to 1994 in Ashworth (1994), and up to 2015 in Uckelman (2015b).

Nevertheless, a great deal more research remains to be done. For example, modern scholars have concentrated mostly on the *positio* game, but what about the other types of games? There are only a handful of studies on the other kinds (for example, Uckelman 2011b, 2015a), so more can be done in that respect. Moreover, each time modern scholars come up with a new mathematical model for these games, new insights are generated. What other kinds of models may help us understand these games? Finally, our understanding of the history and development of these games (even into the late medieval period) is still somewhat spotty, and the question of how to interpret these games is anything but settled.

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PART II

Metaphysics

6

MATTER

John Kronen and Sandra Menssen

These days it is common to see matter as a type of substance, that is, as an entity that possesses features such as shape or mass, as a sort of thing distinct in kind from mind or soul or spirit. This way of understanding matter is now common even among philosophers who deny that immaterial substances exist, and is inherited from Descartes and Locke. Locke, for instance, defined material substances as substances that are “extended, figured [i.e., have shape], and capable of motion,”¹ while spiritual substances as capable of thought, will, and action. In teaching that matter is a kind of substance, Descartes and Locke were themselves resurrecting a doctrine held by many pre-Socratic philosophers, and opposing Aristotle.

The medieval Aristotelian understanding of matter was radically different. Medieval Aristotelians appropriated, in various ways, Aristotle’s basic teaching that matter is *not* a substance. Aristotle held that matter, or rather *prime matter*—the most basic *stuff* out of which material substances are made—is not a substance but a “principle of potency” that needs to be actualized by what he called substantial form in order to constitute, with form, a complete natural body such as a stone, a tree, or a cat. Aristotle offered an explanatory analogy: just as a deposit of copper or silver is not a statue, but only potentially such, only such if given the right form (in this case, the right shape), so prime matter is not a stone or a tree, but is only potentially such, only such if given the right substantial form. This is merely an analogy since for Aristotle copper is a substance but a copper *statue* isn’t—it is a substance plus a certain “accident” (i.e., feature) impressed on it. But a substance and an accident together do not a substance make. Otherwise, when Jill sits down, a new substance will come into being and when she gets up the substance that was the “seated-Jill” will go out of being to be replaced by a new substance, the “standing-Jill.” For Aristotle, Jill getting up, or sitting down, or learning French, are all *accidental* changes, the subject of which is Jill. That is, Jill is the entity undergoing such changes. And the forms she acquires as a result of such changes are accidents, which means they don’t constitute with their subject a new substance, but only make the substance that was *already* there to be “such and such”—seated, standing, French-speaking, etc. But, Aristotle thought, other changes are substantial, such as the coming to be of a diamond, or a kitten’s conception, and the subject of such changes he held to be *prime matter*, and the forms acquired as a result of them, *substantial*. The details of Aristotle’s doctrine are controversial, and he changed his mind on certain important points, but its basic outline is clear enough. In this essay, we want to explain something of the dialectic through which Aristotle’s conception was appropriated and developed by various medieval philosophers.

Some philosophers (e.g., John of Damascus and Bonaventure) held that all created substances, even purely spiritual ones such as angels, are partially made of matter. In holding this they didn’t

mean to imply that angels have bulk or shape, or could be slain or burnt since they thought it is the substantial form of a thing, not its matter, that chiefly determines its essential features. Their reasons for thinking all created substances are partially made of matter stemmed from two propositions many medieval thinkers accepted: (1) creatures, unlike God, receive being from another, and (2) creatures, unlike God, are limited in being and perfection. John and Bonaventure held that the only way to explain these claims about creatures is to hold that all of them are partially constituted by prime matter since matter receives the form and limits it. In supposing all created substances are partially constituted by matter, John of Damascus and Bonaventure were not supposing (like Plato) that matter is something that God didn't create—God created all things, including matter, from nothing (i.e., not out of anything else); but even God, according to such thinkers, could not create angelic forms without “co-creating” the matter such forms are received in, just as not even God could create a replica of the shape of Michelangelo's “David” without co-creating some marble (or copper, etc.) to receive it.

By contrast, Aquinas opposed the thesis that all creatures are partially constituted by matter; in particular, he thought that the angels, being pure spirits, are pure forms without any matter. Certain activities of certain immaterial substances (e.g., intellectual understanding) require they not be made of matter. Although Aquinas agreed with John and Bonaventure that creatures receive being and partake in God's perfections only to a limited degree, he disagreed with them in thinking that such reception and limitation requires matter, arguing that the very *essence* of a created substance (what it fundamentally is) is a sufficient principle for such receptivity and limitation. Consider that even an angelic form, not being a divine form, must be in *itself* limited, not needing matter to limit it. Even if we supposed that the forms of angels are themselves infinite (something no medieval thinker would have supposed), such forms couldn't be limited by being received in matter. Indeed an infinite form could not be received in matter *at all*—only a form that is itself intrinsically limited could be received in matter.

Aquinas's arguments on these points seem to have been decisive. Although many later thinkers (e.g., John Duns Scotus) continued to defend certain other Franciscan notions (Bonaventure was a Franciscan) that Aquinas rejected (e.g., that human beings are constituted by a plurality of substantial forms), very few thinkers after Aquinas defended the view that all creatures, even spiritual ones, are partially constituted by matter.

Aquinas's arguments against the notion that all created substances have matter as a constituent allowed him to focus on Aristotle's central reason for thinking prime matter is real, namely that it is required for what's called “substantial change.” Aquinas sketched other arguments for the reality of prime matter besides the one based on change, but we will focus on the argument from change. This argument supposes that all changes require three conditions: (1) a subject of the change, i.e. the thing that undergoes the change, (2) the privation of some form, i.e. the lack of some form that the subject could have but currently doesn't, and (3) the new form that the subject acquires as a result of the change.

In the case of accidental changes it is clear what the subject of the change is, namely a substance that existed before the change and that picks up new accidents as a result of it. If Bastet the cat gets fatter, or loses her fur, or learns to turn doorknobs, then it is clearly *Bastet* that undergoes these changes, and Bastet is a substance. To say that Bastet is a substance *isn't* to say that Bastet possesses accidents (though they didn't deny this is true); rather, it is to say that Bastet *isn't* an accident. In other words, to say that Bastet is a substance is to say that she is the sort of thing that *cannot* be a feature of something else. Colors, shapes, thoughts, acquired abilities, are all accidents since they are things that *can* be features of something else. There cannot be colors without colored things, shapes without shaped things, thoughts without thinkers who have them, etc., and things that have colors, shapes, and so forth are substances (note that in a marble statue, it's the marble that has the shape, not the statue). Still, Aquinas did not *define* substance as that which has accidents—he defined it as something that exists “in itself,” not in another.

Though it is clear what the subject of accidental changes is, i.e., some substance or group of substances, it is less clear what the subject of substantial changes is, or *could* be. Suppose that Bastet gets hit by a car and dies, leaving a dead body, a “cat-corpse.” What changed into the corpse? Could it be Bastet? No; for then the change would be accidental—like Bastet’s getting fatter, losing hair, etc. But Bastet’s death isn’t like that—*Bastet is no more*, so it can’t be Bastet that changed into a corpse.

Could it be a number of molecules, atoms, etc. that before Bastet’s death were related in the right way to constitute a cat, and that after Bastet’s death have ceased to be related in that way, that are the subjects of the change? No; Aquinas thinks that if this were so, Bastet *would never have been a substance to begin with*, and the change, again, would be accidental. A substance is the sort of thing that cannot be an accident of some other thing, and a group of substances does not make a substance. If certain molecules are related in a particular way so as to constitute a cat, then the cat is (in all respects relevant here) like a number of Legos related in the right way to constitute a “Lego cat.” Suppose that the molecules and the Legos are substances. Then the entity “made” of them is an accidental unity, i.e., it is a number of substances plus certain of their relational accidents, like an army. But a number of substances plus their relational accidents are not a substance—they are not even *an entity*, in the way the blue color uniformly informing a blue marble is an entity. One might claim, of course, that when molecules are arranged in the right way, a new form, a cat form, comes to be “in” them, and that such a form is substantial. But Aquinas would say that any form that is in another substance or group of substances is accidental, and *no* accidental form can be a substantial form (i.e., none can “give” substantial being to a thing).

Could it be Bastet’s body that is the subject of the change? No; Aquinas thinks that if it were, then Bastet’s body would be one substance, not a number of substances put together; but then, again, the change would be accidental. This can best be understood if we suppose that every animal consists of a soul, conceived of as an immaterial substance capable of sensing and feeling, and a body, a material substance, possessing bulk, figure, etc. These two substances will, no doubt, intimately be related in a living animal. Still, if Bastet’s body and soul are distinct substances that can be joined and separated, then Bastet’s death just *is* the separation of her body from her soul. This separation can reasonably be thought to produce profound changes in both, but they will no more be substantial than the changes that occur to a diamond ring if the diamond is separated from the gold band holding it. True, neither the diamond nor the gold will any more be a diamond ring, just as neither Bastet’s soul nor her body will be a cat any more. But Aquinas thinks a diamond ring is not really a thing at all, any more than an army, or a forest; and Aquinas is assuming that an animal is *one* thing, indeed, one *substance*. So Bastet *was* one substance and her death was an instance of a *substantial change*.

So neither Bastet, nor a number of molecules, atoms, etc., nor Bastet’s body, could be the subject that changes when Bastet dies. In other words, none of them could be the “thing” that changed from being an animal’s body to being a corpse.

What, then, *did* change into a corpse? The answer given by Aquinas is that *prime matter* did, something that isn’t a substance at all—indeed isn’t, in itself, an existent being, but only a *capacity* to be. Prime matter has no qualities, no quantity, no active powers—it’s pure stuff, formless gunk that, though real, can’t exist or have any accidental features unless informed by a substantial form that actualizes its capacity to be the body of a human, a cat, an oak, etc., and, in doing so, “clothes” it in all the accidental features characteristic of human, cat, and oak bodies.

Here it seems necessary to consider a certain objection. This objection is that we have overwhelming empirical evidence that chemical compounds are made of atoms, that trees are made of molecules, and so forth, so there just can’t be any prime matter of the sort Aquinas had in mind. Aquinas was aware of an analogous medieval objection to his doctrine, one based on the ancient theory of the four elements—earth, air, fire, and water. According to this theory, compound

substances are made of a mixture of two or more of the four elements. Aquinas's answer to this was to insist that if that were so, then (for reasons we have sketched), plants, animals, and humans wouldn't be single substances, and he thought they clearly *are*; and we cannot know the essences of things through the senses. In particular, different substances can have the same *sorts* of qualities and powers in virtue of different substantial forms (bats fly, but they aren't birds). Thus a water molecule, in virtue of its water-form, could have oxygen-like accidents in some of its parts, and hydrogen-like ones in others.

Some medieval philosophers (e.g., Scotus) held it isn't prime matter alone that changes from being the body of an animal into a corpse, but prime matter *informed* by a form of corporeity (something that makes matter have a human, cat, oak, etc. body), that does. On this view a cat is made of prime matter, a form of corporeity, and a cat soul (which is the *ultimate* substantial form of a cat), and when the cat dies, the corpse that is left is prime matter plus the form of corporeity, minus the cat soul. Still Scotus, like many medievals, held that prime matter is real and is the proximate subject of certain substantial changes, so Scotus agreed with Aquinas about certain cases.

There was, however, a profound disagreement between Aquinas and Scotus on the nature of prime matter, and in particular, on how minimally existent it must be to be the subject of substantial change. Aquinas and his followers insisted that it must have *no* actuality, must be so purely potential that it is given being absolutely speaking (being *period*, one might say) by substantial form, and that not even God could preserve it without substantial form. Scotus and others (e.g., Suarez), held that matter must have some actuality of its own, as well as certain attributes of its own that are unknown to us, though they agreed it could not, simply in virtue of its nature, possess the accidents characteristic of complete natural substances without being informed by the appropriate substantial form. Ockham departed even further than Scotus or Suarez from Aquinas's doctrine of matter (he thought it possessed some quantity of its own), but we will not discuss his views here since the more basic question is whether or not matter has any actuality of its own.

Aquinas's chief argument for the conclusion that matter has no actuality of its own and that existence is "channeled" to it through substantial form rested on the claim that if prime matter had any actuality or existence of its own, it would be a sort of diminished substance, and so *couldn't* be the subject of substantial changes. As he put it,

when matter is said to be a being in act, this doesn't differ from saying that matter is the very substance of a thing; for thus the ancient natural philosophers, who deemed prime matter to be being in act, said that matter is the whole substance of a [material] thing.²

In support of their master's doctrine, later Thomists pushed Aristotle's analogy as follows: just as natural bodies, the matter of artifacts, such as copper or wood, have no artificial being before receiving an artificial form (i.e., the form of an artifact), so prime matter, the matter of natural bodies, has no natural being "before" (i.e., independently of) receiving a substantial form. Aquinas also argued that to suppose matter to exist without form is to suppose there could be a substantial entity that is no particular sort of substantial being; but this is as absurd as supposing that there could be, say, an animal that is no particular sort of animal.

Those like Scotus who held, contra Aquinas, that matter has some existence of its own independently of form, gave various arguments for their view. One important argument (for later reference, let's call it "the argument for matter's actuality based on the principle of the excluded middle") went as follows. Either prime matter, taken in itself "before" being informed by substantial form, is something real outside a state of pure possibility and its creating cause (i.e., what created it, namely God), or not. If not, then it is nothing and so can't be the subject of substantial changes. But if so, then it has an existence and actuality of its own. Therefore, either prime matter is nothing and so can't be the subject of substantial changes, or it has an existence and actuality

of its own. But prime matter is not nothing and it is the subject of substantial changes. So, prime matter has an existence and actuality of its own.

Other arguments contrary to Aquinas's view were more narrowly focused on substantial change itself, attempting to establish both that (1) matter must be the "carrier" of certain accidents from the substance corrupted in a substantial change to the one generated, and (2) if it is such a carrier, it must have some actuality and existence of its own not channeled to it by the substantial form that currently informs it. These arguments were stated with the greatest force by Suarez since he, like Aquinas, rejected the form of corporeity. To understand Suarez's arguments for the propositions (1) and (2), it must be realized that Suarez believed accidents can't normally "fly" from one substance to another—though Bob's constant complaining when he has a headache may causally contribute to Frank's getting one, Bob's headache, an accident *of* Bob, can't fly out of Bob, and land in Frank. So, if there are reasons to believe that certain accidents that were there in the corrupted substance (i.e., the substance that ceased to be during a substantial change) are there in the generated substance (i.e., the substance that comes to be as a result of the change), it must be that the matter that was in the corrupted substance "carried" certain accidents of that substance to the generated one. But if matter can carry some accidents from one substance to another, then matter must have some being of its own, absent substantial form, otherwise it could not, in itself, sustain the accidents it carries from the corrupted to the generated substance.

The most important argument given for the view that matter *does* carry accidents from corrupted to generated substances began with the assumption that, for a substantial change to occur, matter must gradually be worked on so that it ceases to be a fit "home" for a certain sort of substantial form, and becomes fit for a new sort. For example, if the matter that now partially constitutes a tree is to come to partially constitute some ashes, certain accidents favorable to the continued information of the matter by a tree-form must be destroyed, and others favorable to the information of it by an ash-form must be introduced. This happens if the tree is set on fire—the fire, if not put out, will gradually act on the matter of the tree so as to destroy accidents making that matter the fit home for a tree-form, and will dispose it more and more to being the home for an ash-form. And this requires that at the very moment the tree-form is corrupted and the ash-form generated, certain accidents introduced into the matter while it was still informed by the tree-form *continue* to be in it, thereby disposing it for the ash-form.

Scotus, Suarez, and others responded to Aquinas's insistence that if matter had any actuality of its own it would be a diminished substance, by arguing that something that in itself lacks all active powers isn't a substance, since every substance is able to efficiently cause some changes. So, a subject like prime matter, since it naturally lacks all active powers, can reasonably be held to be only potentially a substance (or part of a substance), rather than a complete substance, even if it has some existence of its own. They responded to Aquinas's argument that to suppose prime matter has an existence of its own is like supposing something could be a substance without being any particular kind of substance, by arguing that prime matter is an incomplete substance that has certain attributes (even if no accidents) of its own, though these attributes are not directly known by us. Specifically, prime matter has all those attributes (taken as the ground *in* it of predicates truly holding of it, though that ground is not really distinct from the essence of matter itself) it needs to be the subject of substantial changes and to contribute its share in the generation of certain accidents of material substances, e.g., quantity and the divisibility that follows upon quantity.

Aquinas couldn't directly respond to the arguments of Scotus and other later thinkers for matter's intrinsic actuality, but his followers, the Thomists, defended their master's teachings. They thought that the argument for matter's actuality based on the principle of the excluded middle committed the fallacy of the false dilemma. In particular, they held that its first premise ignored the reality of potency, and fell into the mistake of the "old natural philosophers" (i.e., the pre-Socratics), who held that whatever is real is actual, and whatever is not actual is nothing. John of

St. Thomas, a seventeenth-century Thomist, was perhaps the clearest on this point. He wrote that though matter is “outside a state of possibility” it is so only “dependently upon an act giving being formally,” not “independently of every act and form.”³

In short, defenders of Aquinas and his school insisted on the reality of *radical* potency, which though real, can only exist (or rather co-exist) with the help of something that intrinsically actualizes it by making it to be a “this something” rather than a “that something.” And here they were not afraid to use an analogy: just as some clay must be one shape or another to exist, so prime matter must be actualized by one substantial form or another to exist. This is only an analogy since, though having some shape is a necessary condition for clay to exist, the shape ontologically depends on the clay, not the other way around, while form gives *substantial* existence to matter, or rather is the channel through which existence is given to matter.

The answer of the Thomists to the argument for the conclusion that prime matter must carry accidents from the corrupted to the generated substance in every substantial change consisted in saying that, though a created agent (i.e., any created substance, even an inanimate one, insofar as it is actively causing changes) may often need to work for some time on matter to strip it of dispositions making it a fit home for the substantial form currently informing it, the agent *need not* take time to give it new dispositions once it has stripped matter of all substantial and accidental forms. For at *that* moment matter, which is in potency to all material forms, will offer no resistance to an agent having the power to introduce into it a certain substantial form *simultaneously with all the ultimate dispositions necessarily accompanying such a form*. Fire may need to work on matter currently informed by a tree-form in order to destroy in it those dispositions necessary for it to have a tree-form. But once those dispositions are destroyed, and along with it the tree-form, the fire can immediately introduce into the matter the ash-form and, in the same instant, all the dispositions necessary for that form. The Thomists further added that the *ultimate* dispositions necessary for matter’s information by any particular sort of substantial form will not only exclude any other sort of substantial form from informing matter at that time, but also the ultimate dispositions that go along with any other form. For example, the ultimate dispositions necessary in matter for it to be informed by the human soul (perhaps dispositions associated with the human brain) will exclude any other substantial form from informing matter at that time, as well as excluding from it the ultimate dispositions necessary for any other sort of form (e.g., dispositions necessary for an oak-form, or a canine-form, or a gold-form).

Further Reading

Many texts on particular medieval thinkers include a significant discussion of the concept of matter. For example, see Adams (1987), Cross (1999), Hill and Lagerlund (2012), and Pasnau and Shields (2004).

Those who wish to delve particularly into the questions we raise in this article concerning matter might consult Des Chene (1996, 2000), O’Neill (1923), and Pasnau (2011). Pasnau’s book is totally devoted to problems surrounding the metaphysics of substance; it probes different views of matter and form in great detail.

Those especially interested in understanding how Aquinas’s philosophy of nature fits in with his theological views might consult Gilson’s *The Christian Philosophy of St. Thomas Aquinas*, sometimes called simply *The Philosophy of St. Thomas Aquinas*—various versions were published by Gilson; the last of these versions was Gilson (1994). Those interested in how Scotus’s philosophy of nature fits in with his theological views can consult Cross (1998).

Two recent studies arguing for the continuing relevance of Aquinas’s philosophy of nature to contemporary philosophy are Brown (2005) and Stump (2003). Studies that seek to show the philosophical core of Aristotle’s notion of matter is consistent with modern physics include Maritain (1995) and Suppes (1974).

Notes

- 1 Sandra Menssen would like to note that John Kronen is the lead author of this article. John Locke, *An Essay Concerning Human Understanding*, Bk. II, ch. XXIII, par. 8 (1975).
- 2 Aquinas, *Opusculum* 15, *On Separate Substances*, ch. 7, quoted by John of St. Thomas in *Cursus Philosophicus Thomisticus*, Vol. II, *Naturalis Philosophicae* (1933: 63).
- 3 John of St. Thomas (*ibid.*: 65).

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7

FORM

Thomas M. Ward

Most philosophers make their acquaintance with Forms through Ancient Philosophy, and in particular through Plato and Aristotle, and most are familiar with the following story. According to Plato, Forms are eternal, immutable, mind-independent, and necessarily are not objects of sensory perception. The Forms are truly Real and therefore are the only objects of genuine knowledge. Sensible objects do not really have the essences we attribute to them: your dog is not really a dog, Helen of Troy is not really beautiful, the circle you draw with compass and steady hand is not really a circle. Instead, these sensible objects are merely *similar to*, or *participate in*, the Forms of The Dog, The Beautiful, and The Circle. Aristotle rejected Plato's Forms as theoretically wasteful and philosophically incoherent, but retained the idea that Forms alone are truly knowable. Aristotle brought the Forms down to earth by making them constituents of sensible objects; your dog really is a dog, according to Aristotle, because it has The Form of Dog as a constituent. Aristotle gives to Forms a definite job description: they give structure and character to matter.

Medieval thinkers inherited and retained both Platonism and Aristotelianism about Form, but the term *forma* came to be used almost exclusively with reference to Aristotelianism. Platonic Forms needed considerably more alteration to fit medieval philosophical theology (especially the Christian variety) and while they did, in a sense, survive, they survived under a different title. Why they needed alteration and in what sense they survived can only be understood with reference to God. In the Middle Ages, the three monotheistic religions shared a philosophical conception of God that has come to be called *classical theism*. Crucially, the God of classical theism has nearly all the properties characteristic of Platonic Forms: God is eternal, immutable, immaterial, and so on. He is not supposed to depend on anything for his knowledge or his power, and everything other than Him is supposed to depend on Him for its existence and power. And He is at least one Person—one person according to Islam and Judaism, three according to Christianity—so He has both Intellect and Will, or Knowledge and Love. Classical theism demands that Platonic Forms, if there are any, must be subordinate to God: they must depend on God for their being or existence, and just as importantly they must depend on God for their being what they are. The Forms have no primeval blueprint in the void, with which God is cognitively in touch and on the basis of which he produces the Forms. Instead, if the Forms are made, God both makes them and makes them up.

The majority view among medieval philosophical theologians is that Platonic Forms do not exist as things outside of God's mind. Instead, they exist, to the extent they exist, as Ideas in God's Mind. In this way, they retain much of their Platonic prestige: since the God of classical theism is simple, we can infer both that God is identical with God's Intellect and that God is identical with each and every one of His ideas. Since identity is a transitive relation, God's Ideas can boast

of all the divine attributes: they too are immutable, eternal, immaterial, simple, and so on. In this attenuated way, Platonism about Forms survived throughout the Middle Ages.¹

A second and more obvious survival of Platonism about Forms concerns the Form of the Good. In *Republic* VI, Socrates speculates that the Form of the Good is not only that form by which all the others can be known, but is also that form by which they exist and are as they are. In other words, the Form of the Good both makes and makes up all the other Forms. With some qualifications, it's easy to identify the Form of the Good with the God of classical theism: divine revelation illumines what Plato could only adumbrate.

In these vestigial ways, Platonism about Forms was not at odds with Aristotelianism about Forms in the Middle Ages. The two theories belonged to two distinct "sciences": Platonism to theology, and Aristotelianism to natural philosophy.

Aristotelianism about Forms was, however, arguably the dominant conception of forms in the Middle Ages and indisputably is the theory of forms most utilized in explicit philosophical appeals to form. The conception of forms outlined in the remainder of this essay, therefore, is broadly Aristotelian.

Matter and Form, Act and Potency

Following Aristotle, medieval philosophers understood material objects to be composites of form and matter, where matter is supposed to be that which is or has a potency to constitute a material object of some kind and where form is supposed to be that which actualizes the potency of matter. For example, some clay has a potency to constitute a statue of Aristotle and this potency is actualized if a sculptor imposes the right kind of form on the clay. More strictly, the potency of clay to constitute a statue of Aristotle is actualized if and only if it receives the right kind of form. So a form in general is a potency-actualizer and therefore was often called simply, act (*actus*). And since matter is wholly dependent on form for the actualization of its potencies, it was often called simply, potency (*potentia*).

There were two equally important and non-competing conceptions of matter: proximate matter and prime matter. Proximate matter corresponds most closely to a commonsense account of what a thing is made of: the water bottle is made of plastic, the statue is made of clay, the book is made of paper. Prime matter, however, is an unobservable theoretical entity which is the last possible answer to questions about what a thing is made of and is itself made of nothing. The motivation for prime matter is the intuition that a material object cannot have an infinite regress of constitution relations so there must be an Unconstituted Constituter: some material object, *O*, is made of some proximate matter, *m*, *m* is made of *m*^{*}, *m*^{*} is made of *m*^{**}, and (perhaps) on and on, but *O* must have some last proximate matter, *m*^{*(n)}, that is not made of *m*^{*(n+1)} but is instead made of prime matter. For example, the water bottle is a composite of plastic and some form, but the plastic of the bottle is itself a composite of form and matter, where its matter is whatever plastic is made of and its form is whatever actualizes the potency of that matter to constitute plastic. Any proximate matter is, therefore, itself a composite of form and matter. Only one kind of thing can play the role of prime matter, and prime matter and matter are the only labels available for it. But many kinds of things can play the role of proximate matter: a natural substance (such as wood) might be the proximate matter of an artifact (e.g. a wooden bed), an artifact (such as plastic) might be the proximate matter of an artifact (e.g. a plastic water bottle), and a natural substance (such as Socrates) might be the proximate matter of an accidental unity (e.g. white-Socrates or tan-Socrates).²

Substance and Accident, Substantial and Accidental Forms

Medievals distinguished form into two irreducibly distinct kinds: substantial and accidental, which correlate closely with the distinction between substance and accident. The substances are

the things belonging to natural kinds: paradigmatically organisms, the four elements recognized by the chemistry of the day (earth, water, air, fire), and some mixtures of these elements (e.g. gold or iron). Among the very many properties belonging to any substance, some have a linguistic correlate in a real definition of the essence of that substance and are therefore *essential properties*. Some are caused by essential properties but are not themselves part of the essence of a substance and these are called necessary accidental properties, or *necessary accidents*. But some properties of a substance only contingently characterize a substance and these are the accidental properties, or *accidents*, most often in mind when medieval philosophers write about accidents. For example, Socrates is a rational animal and, say, six feet tall. These properties differ in that being a rational animal is an essential property of Socrates and being six feet tall is an accidental property of Socrates. Socrates might change his height without ceasing to exist, but to cease to be a rational animal is, for Socrates, simply to cease to exist, since rational animality constitutes Socrates's essence, humanity. Here is an example of a necessary accident: Socrates's having the ability to laugh (*risibilitas*) is in some sense caused by his essential property of rational animality and is therefore, while a necessary property of Socrates, not among his essential properties.

Corresponding to this division between substance and accident is the division between substantial and accidental forms. In general but with important exceptions, a substantial form endows a substance with its essential properties and accidental forms endow a substance with its accidental properties. In a somewhat loose way of speaking, a substantial form is sometimes identified with the essence of a substance (e.g. in Aquinas's *Being and Essence* 1).³ But this is technically incorrect (as Aquinas himself says).⁴ The essence of a material substance includes not just substantial form, but matter as well—it is essential to a material substance (of any kind) to be material, we might say. The loose way of speaking is authorized, however, because prime matter is common to all material substances of all kinds, whereas the distinctive essential properties of a member of some natural kind derive from its substantial form, even if they are not identical with its substantial form. Strictly speaking, a substantial form is not a property of a substance but is, in medieval jargon, an *essential part* of a substance (along with matter).⁵ A substantial form of humanity together with matter therefore *composes* a human being. But it is alien to medieval Aristotelianism to say that the *property* of being human *composes* (with what?) a human being. Instead, Socrates, say, has the property of being human *because* he is composed of matter and the substantial form of humanity. This point may be better understood by recalling that for medieval Aristotelians, the substantial forms of living things were also called souls. So Socrates's substantial form of humanity is identical with his soul. But, of course, Socrates's soul is not his property of being human.

To say that accidental forms endow a substance with its accidental properties is also a loose way of speaking. This is because no medieval philosopher thought that there was a distinct form corresponding to each and every of the many accidental properties of a substance. It is true, for example, that if Socrates is six feet tall, then he is six feet tall or a banana, but having the property *being six feet tall or a banana* was not supposed to require having an accidental form of *being six feet tall or a banana*. Many medievals (not just Ockham) subscribed to the Aristotelian methodological “razor” principle according to which entities are not to be posited without necessity, so they tried to account for all the accidental properties of a substance with as few accidental forms as possible.⁶ The kinds of accidents recognized by medieval Aristotelians were those falling under the Aristotle's nine accidental categories—quality, quantity, relation, place, time, position, having, action, and passion⁷—but many denied that one needed to posit one sort of thing for each category in order to preserve the truth of all nine kinds of accidental predication. For example, Ockham denied that there were forms of quantity, since he thought that matter was extended by its own nature, rendering extra forms of quantity superfluous;⁸ and Aquinas denied that there were forms of relations, since he thought that these were reducible to non-relative forms like qualities and quantities.⁹ Additionally, the form whose presence in a substance is supposed to explain that substance's having

some accidental properties is sometimes its substantial form. Risibility is an example of just such a property, since there is no accidental form of risibility, but there is a substantial form of rational animality the presence of which in a substance is supposed to be all that is needed, ontologically speaking, to account for that substance's being risible. So in general we can say that while there may not be an accidental form corresponding to every accidental property, where there is an accidental property (however contrived), there is at least one accidental or substantial form whose presence in a substance accounts for the having of that property.

I claimed earlier that substantial forms cannot be identified with essential properties and collections of essential properties. Whether accidental forms are identical with accidental properties is less clear. What is clear is that there is not a distinct accidental form for every distinct accidental property of a thing; for example, there is no such form as being six feet tall or a banana. But, for many medieval philosophers, when a substance is six feet tall, there is a quantitative form in virtue of which it is six feet tall, and we may well wonder whether that substance's being six feet tall just is, in every respect, its having that form (that is, we may wonder whether the "in virtue of" relation is in this case just identity). Or, to use another, simpler, example, we may well wonder whether a substance's being green just is, in every respect, its having a form of greenness. As far as I can tell, it is. So long as we keep in mind that no medieval philosopher thought there was a distinct form for every distinct property, it seems safe to identify some accidental properties with accidental forms. An accidental property that does not have its own accidental form, e.g. being six feet tall or a banana, is either caused by an accidental form or includes at least one accidental form as a part. This entails, of course, that there is no medieval theory of properties generalizable to all properties, for it entails that some properties are forms and some aren't. Just how to distinguish the properties that are forms from those that aren't is difficult and complicated and won't detain us here.

Individualized Forms

Most medieval Aristotelians on both sides of the realism/nominalism debate thought that substantial and accidental forms were individualized in the individual substances of which they were forms. For example, the form of humanity in Socrates is an individual substantial form, Socrates's soul, rather than the universal, humanity. And the form of greenness in the green leaf is an individual accidental form of greenness rather than the universal, greenness. A prominent exception to this general view is Walter Burley, one of the few full-blown realists from the Middle Ages.¹⁰ Nominalists ascribed to the doctrine of individual forms for obvious reasons: for them, only individuals exist, so individual substances and all their metaphysical and physical parts are, if they actually exist, individuals.¹¹ Most realists or "moderate" realists followed nominalists in thinking that forms are individualized in the substances of which they are forms while proposing different ways of accounting for the sort of unity that a property has in its many instances.¹²

Pluralism versus Unitarianism about Substantial Forms

Medieval philosophers debated whether one material substance could have more than one substantial form.¹³ Those who argued that a substance could have no more than one, Aquinas chief among them, argued from the unity of a substance to the unicity of substantial form. Those who argued that a substance could have more than one argued from the different persistence conditions of a whole substance and one or more of its parts. For example, pluralists such as Duns Scotus and William Ockham maintained that when a human being dies and leaves behind his corpse, the corpse is identical with something that used to be a part of a human being—the body of a human being. Since the corpse itself is, arguably, a substance, and therefore a composite of matter and at

least one substantial form, pluralists concluded that a human being was a composite of matter and at least two substantial forms: a soul and a substantial form of the body. The metaphysical issue here is about composition: under what conditions can a plurality of substances (each with their own substantial forms) compose one substance, with its own substantial form?¹⁴ Unitarians argued that under no conditions can a plurality of substances compose one substance, while pluralists urged that one substance could have a plurality of substances as parts and gave different and sometimes competing accounts of the conditions under which they could.

Unitarians were committed to a certain version of the view that wholes are prior to their parts. This version has it that the evident complexity of the parts of a material substance can be explained wholly with reference to prime matter and one substantial form, and that one substantial form is in some sense a cause of the existence of all the parts characteristic of a substance having such a substantial form. For example, according to the unitarians, a human being is composed of prime matter and exactly one soul, the rational or intellective soul, and this one soul united with matter brings it about that there are all the organs and other parts characteristic of a functioning human organism. None of these parts existed prior to the composition of soul and matter, and none will exist after their decomposition.

Pluralists, by contrast, are committed to some version of the view that parts are prior to the wholes of which they are parts. Strictly speaking, of course, nothing is a part until it is a part *of* some whole; so parts can never be prior to their wholes. What these pluralists are really committed to, then, is the view that some things that are parts of a substance can exist without being parts of that substance. For example, according to the simplest version of pluralism about substantial form, which holds that, e.g. a human being is a composite of prime matter and exactly two substantial forms (an intellective soul and a substantial form of the body), the composite of prime matter and the form of the body—call this *the body*—can exist, can be the very body it is, even if it is not a part of a human being. And pluralists who adopt this simple version of pluralism think it not only can but does so exist: first, during the early stages of embryological development, prior to the generation of a human being; and second, when body and soul are separated at death and a corpse is left behind.

Motivations

Now I would like to turn to some of the philosophical motivations for thinking that there are forms in the sense under discussion. I will discuss three common ways of arguing that material substances are composites of material and formal parts. Of these, the third was by far the most common way in which medieval Aristotelians argued for a division between form and matter.

Material Constitution

That which constitutes a material substance is whatever it is made of.¹⁵ In a standard modern example, this statue (of Aristotle) is made of clay and therefore the clay constitutes the statue. If you inspect the statue, you'll only see, hear, taste, touch, or smell clay; all of its physical parts are clay. A hylomorphist thinks there's more to the statue than the clay, however. More precisely, she thinks that the clay and the statue are in some sense two things. To see why, imagine squashing the clay and rolling it up into a ball; you've thereby destroyed the statue, but you haven't destroyed the clay. You have the very same clay before you, now shaped into a sphere rather than, say, a likeness of Aristotle. So it is true of the clay right now, at time *t*, that it has been shaped into a sphere, but it is not true of the statue that it has been shaped into a sphere, since the statue was destroyed at some point in the squashing process prior to *t*. (Determining at which point precisely in the squashing process the statue ceased to exist is vexatious and won't detain us here.) At *t*, then, we can say that

the clay has the property, *is in the shape of a sphere*, but the statue does not have this property at *t*, because the statue does not exist at *t*. By the Indiscernibility of Identicals, we know that if the clay and the statue were altogether the same, if there was nothing more to the statue than its clay, then any property the clay has the statue would also have. But the clay has a property at *t* which the statue lacks at *t*, so the clay and statue are not altogether the same.

Someone might object that it's no good to argue for the distinction between the clay and the statue in the way I've done, precisely because at *t* the statue no longer exists and so, of course, the clay could be neither the same nor different from it. But, the objector might propose, as long as the statue did exist, it was the same object as the clay.

The reason why this objection fails is that it ignores the different modal properties that the clay and the statue have at every moment each exists. A modal property of an object is any property that gives a power or capacity to an object; such properties often take the forms, *is possibly F*, *can be F*, *is not possibly F*, *cannot be F*, *is necessarily F*, *must be F*. But they need not take these forms. Properties like *is fragile*, *is soluble*, *is available*, *is non-potable*, and so on are also modal properties since they give a power or capacity to whatever has them. Now at every time the statue existed, the clay had the modal property, *can be shaped into a sphere*, but the statue lacked this property. So, again by the Indiscernibility of Identicals, we know that the statue and the clay are in some sense two things.

If the relation that the clay and the statue have to each other is not identity, then, what is it? A hylomorphist thinks that the relationship is best explained as a special kind of part-whole relation.¹⁶ In the language of mereology, the clay is a *proper part* of the statue, where *proper* parthood is an antisymmetrical parthood relation (the clay is a part of the statue but the statue is not a part of the clay). If the clay is a proper part of the statue, then intuitively the statue has at least one proper part in addition to (or, in the language of mereology, *disjoint from*) the clay. The hylomorphist calls this additional part a form. The statue is then a composite object having at least two proper parts: its matter (the clay) and its form. The form is not itself clay nor is it made of clay; in fact, it is not itself a physical object or made of physical objects. If it were and if it were a part of the statue, then it would be a part of the statue by being a part of what constitutes the statue, in which case we'd be back at square one, trying to give an account of the difference between the statue and what constitutes it. So we must say that it is a nonphysical item whose job, as far as Material Constitution is concerned, is to be a proper part of the statue disjoint from the clay. Generalizing from our example, we can say that for any (real, non-arbitrary) physical object of which we give different answers to the questions, "What is it?" and "What is it made of?" that physical object is a composite of matter and form. Physical objects of which we give exactly the same answers to these questions or of which it wouldn't make sense to ask the second question are, if there are any, genuine physical simples.

Unity

Were Material Constitution the only route to forms, there wouldn't be much for forms to do. According to Material Constitution, form's job is to be a part; what else it does for the object whose form it is is strictly speaking not relevant to Material Constitution. But other motivations for hylomorphism assign additional tasks to form. Unity is one of these motivations.¹⁷

For many composite objects, the parts that compose such an object can exist and fail to be parts of that object. A tree is a part of a forest; transplant the tree from the forest to your backyard (where there are no other trees) and it still exists as the same tree it always was but it is no longer a part of a forest. All the stones in a dry stone wall might be scattered; they'd still exist but wouldn't compose a wall. The bread and ham that make up the ham sandwich existed before they made up the sandwich and could go on existing even if we destroyed the sandwich by taking it apart

(instead of by eating it).¹⁸ These examples and countless others demand some account of what it takes for some things—in addition to merely existing—to compose, be unified as, one thing.

Hylomorphists say that, for some kinds of composite objects, forms make the difference between things merely existing and their both existing and composing a composite object. A form, on this view, is a unifying entity or principle. Some material objects compose one material object just in case they are together informed by one and the same form.¹⁹

What sort of form is invoked to account for the unity of a thing depends on the sort of unified thing under discussion. Forests, dry stone walls, and ham sandwiches all fail to be substances, by medieval Aristotelianism's lights; so each lacks a substantial form. (There is no such thing as a substantial form of a forest, a dry stone wall, or a ham sandwich.²⁰) So the form accounting for their unities will be some sort of accidental form or forms, perhaps an ordered series of spatial relations. An organism, by contrast, has a kind of unity that demands a substantial form. You don't get a human being just by having all the human parts in your laboratory or in an organ bank; nor do you get one by having them all spatially arranged just as they are when they compose a human. Instead, the parts need to function together in certain ways, ordered to the characteristic activities of human life. Aristotelians say that this more-than-spatial, functional unity is explained by the human substantial form or soul, a non-relative form which organizes material parts into an organism belonging to the natural kind, human being. So the human substantial form is meant to explain the difference between a living, breathing human being, and a bunch of human parts (or a corpse). It is important to qualify, however, that medieval philosophers did not think of forms (whether substantial or accidental) as the only sort of principle of unity. This is most clearly seen in medieval discussions of how matter and form themselves are unified. On pain of infinite regress, we cannot appeal to a new form to explain form and matter's unity, so something else has got to do this: one common solution is that there is something about the natures of matter and form as act and potency that make them *made to be together*, as it were—no additional *thing* is required to account for their unity.²¹

Change

Change is the most characteristically Aristotelian, and thus most characteristically scholastic, way to argue for the division of material substances into form and matter. It assumes the reality of many sorts of changes and posits the division between form and matter as the best way to account for these changes.²² Broadly speaking, we can distinguish all relevant changes into two sorts: accidental and substantial. An accidental change is a change occurring in or to a substance which leaves the substance the very same substance it always was. Suppose Socrates goes down to the Piraeus and gets a tan; he has undergone a change, a change in the color of his skin. But the change is superficial; Socrates is the same man he always was, he's just a little darker. A substantial change, by contrast, is a change whereby a new substance comes into existence through the destruction of one or more substances. When a sperm cell fertilizes an ovum, the sperm and ovum are corrupted and a new substance, a zygote, begins to exist. The zygote has parts which are identical with or very similar to parts of the corrupted gametes, but the gametes are gone. Hylomorphism puts forms to work to develop a metaphysical account of both sorts of change.

We will start with accidental change, as it's the easier to motivate. Many composite substances, and paradigmatically organisms, persist through many changes. Socrates as a man is taller than Socrates as a boy, but he is exactly the same *person* or *human being* as he was when he began to exist. Man-Socrates is in fact identical with boy-Socrates. Now a straightforward application of the Indiscernibility of Identicals entails the conclusion that man-Socrates and boy-Socrates are not identical, since the two have different properties: man-Socrates is six feet tall, while boy-Socrates is four feet tall. But we want to go on saying that boy-Socrates and man-Socrates are

the same human being, and we don't want to deny the Indiscernibility of Identicals. So what to do? Hylomorphists bid us distinguish the *substance* that Socrates is—this human being—from his *accidents*, the many ways in which this human being is characterized, many of which (such as skin-color and height) change or can change over time. Hylomorphists say that all or many of these accidents are accidental forms which compose *accidental unities* with the substances they characterize. Man-Socrates and boy-Socrates are therefore two really distinct accidental unities because these two differ in their accidental forms (one has a form bestowing the property of being six feet tall and the other has a form bestowing the property of being four feet tall, etc.), and this satisfies the demand of the Indiscernibility of Identicals that we ought to count two things when counting man-Socrates and boy-Socrates. But both accidental unities share exactly one *substance*—this human being, Socrates—which is a part of each accidental unity and is the subject of the accidents characterizing each accidental unity, and this satisfies the demand of commonsense that we count one thing when counting man-Socrates and boy-Socrates. And because Socrates is the subject shared by both accidental unities, we can say that man-Socrates comes from boy-Socrates rather than that the former merely replaces or comes after the latter.

Hylomorphists are not committed to the claim that for every accident or accident-type, there is a corresponding form, as discussed previously. Still, the basic strategy for accounting for accidental changes was to divide the substance from nonessential characteristics and explain the loss and acquisition of these nonessential characteristics as the going-out-of and coming-into-existence-of numerically distinct accidental unities which all share one and the same substance as a part and as the subject of the accidental forms of each accidental unity. Socrates changes because he becomes the subject of new accidents.

A hylomorphic account of *substantial* change is best understood by analogy to a hylomorphic account of accidental change. We want to say that a zygote comes from gametes, just as we want to say that man-Socrates comes from boy-Socrates. To explain the accidental changes from boyhood to manhood, the hylomorphist distinguishes between substance and accident and says that Socrates persists through these changes because Socrates is the subject, first, of accidents characteristic of boyhood and, next, of accidents characteristic of manhood. By analogy, the hylomorphist argues that a substance itself has a composite structure such that one part, its *matter*, can persist through substantial change, while another part, its *substantial form*, is destroyed when the substance itself is corrupted. When a substance is corrupted, its matter becomes united with a new substantial form, thereby producing a new substance. If the union of a substance with its accidents is an *accidental unity*, the unity of matter with its substantial form is a *substantial unity*, or more commonly, a *substance*. For example, the two gametes whose union under the right conditions results in the production of a zygote are two substances, each a composite of matter and substantial form. When a sperm fertilizes an ovum, each is corrupted and a zygote begins to exist. In a hylomorphic analysis of this change, the matter of the gametes becomes the matter of the zygote when the substantial forms of the sperm and ovum are destroyed and the substantial form of the zygote is produced. The zygote itself is the composite of the matter which has persisted through the change and the new substantial form. So hylomorphism about substantial change is meant to save the appearance that the new substance, the zygote, comes *from* the old, the gametes, and does not simply come *after* them or *replace* them; it comes from them inasmuch as one of its parts, its matter, formerly was a part of the sperm and a part of the ovum.

Pluralists about substantial form were free to hold that the persisting subject of a substantial change was itself a substance, for example, a body. But unitarians were committed to the claim that any change in which a composite of matter and substantial form persists as subject is *ipso facto* not a substantial change. Instead, the only substantial changes are those in which prime matter alone persists as subject. Later, however, some unitarians would assert that some accidental forms could inhere directly in prime matter and so persist with prime matter through genuine

substantial changes.²³ The overall trajectory of medieval Aristotelian thought about the ontological status of prime matter is to give it an ever heftier metaphysical role, less dependent on forms for its having properties, thus anticipating the collapse of hylomorphism and the rise of a variety of early modern accounts of the metaphysics of material objects that eschew form altogether. For this collapse, both unitarians and pluralists were at fault.

Conclusion

To sum up, for medieval Aristotelians, a form is a nonphysical entity the union of which with an appropriate subject actualizes a potentiality of that subject. Forms are divided into substantial and accidental, where a substantial form unites with matter to produce a new substance, and an accidental form unites with a substance to produce a new accidental unity. Medieval debates about whether one substance could have a plurality of substantial forms were debates about whether a substance could be composed of substances. Pluralists were committed to the thesis that at least some of the parts of a substance exist prior to and independent of the substantial form which endows that substance with its essential properties, while unitarians were committed to the thesis that the parts of a substance are posterior to that substance and depend on substantial form for being what they are. Medieval Aristotelians put forms to work in at least three metaphysical jobs: they offer an appealing account of the distinction between a material object and what that object is made of, they are principles of unity for some sorts of unity, and most especially, they help to preserve commonsense intuitions about the reality and distinctness of substantial and accidental change.

Notes

- 1 For further discussion, see Klima (2013), especially section 5, “Platonic Forms as Divine Ideas.”
- 2 For further discussion, see Adams (1987: vol. 2, ch. 15); Pasnau (2011), Part I; Brower (2014: ch. 1); Feser (2014: chs. 1 and 3).
- 3 Aquinas (1976).
- 4 Ibid.
- 5 For a discussion of essential parthood, see Normore (2006) and Ward (2014: chs. 3 and 4).
- 6 Aristotle (1984), *APo.* I, 5 86a33–36. Walter Chatton offers an interesting exception to the method of parsimony. See Keele (2014: section 3).
- 7 See Aristotle (1984, *Categories* 1–8).
- 8 Adams (1987: v. 2, ch. 16).
- 9 Ward (2010).
- 10 Burley (1497: 3rb–7rb), cited in Spade (1994: 115).
- 11 King (1994); Adams (1987: vol. 2, ch. 16).
- 12 For further discussion, see Cross (1998: 34–40); Spade (1994: vii–xviii).
- 13 Cross (1998: ch. 4); Adams (1987: vol. 2, ch. 15).
- 14 Ward (2014: chs. 5 and 6).
- 15 Brower (2014: section 7.3); Rea (1995).
- 16 Koslicki (2008); Brower (2014: section 4.3).
- 17 Pasnau (2002: sections 3.2–3); Pasnau (2011: chs. 24 and 25); Ward (2014: chs. 5 and 6).
- 18 Fine (1999).
- 19 Johnston (2006).
- 20 Of course, this is not an a priori pronouncement. Aristotelians are equipped with some tools for picking out substances from non-substances. In general, the substances are those composite objects which exhibit some sort of unified activity that cannot be reduced to the activity or activities of one or more of their parts. See Scotus, *Quaestiones super Libros Metaphysicorum Aristotelis VII*, q. 20, n.51 (1997: 393).
- 21 Duns Scotus is an important exception to this general view. See Ward (2014: chs. 3 and 4).
- 22 Adams (2012: ch. 1); Brower (2014: chs. 3 and 4); Ward (2014: ch. 1).
- 23 Buridan (2010: 224–228).

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8

RELATIONS

Heine Hansen

Medieval thinking about relations is historically as well as theoretically embedded within the larger context of the Aristotle's theory of categories. This basic fact is important, both because it had a profound impact on the way medieval philosophers thought about relations and because a great many of the questions that come up in medieval debates arise more or less directly out of the basic commitments of that theory. Three commitments are particularly important.

First, relations make up a distinct category, the category of relations. This, at least *prima facie*, suggests two things: one, that relations somehow belong to the furniture of reality; and two, that they are somehow significantly different from items belonging to other categories such as substance, quality, and quantity.

Second, relations are accidents. Accidents are characterized by being in a subject, and it is this feature that distinguishes them from substances (substances are characterized precisely by not being in a subject). Roughly, the exclusive and exhaustive distinction between substance and accident is one between natural kinds and their members on the one hand, and the properties and features of those kinds and their members on the other. Thus, for example, the property paleness is in whatever substance has that property, but not vice versa. One implication of an entity *x* being in another entity *y* as a subject is that *x* is dependent on *y* for its existence (Aristotle, *Cat.* 2.1a24–25). In sum, relations require subjects in which to be and depend on those subjects for their existence.

Third, as with all other categories, relations come in two kinds: universals and particulars. This is important to notice because in many contemporary debates, it is simply assumed that relations are universals. The medieval debates, by contrast, are concerned mainly with particular instances of relations, which, it was normally assumed, are what inhere in substances and do the actual relating between them.

Relatives

The word “relation” is an abstract term that comes from Latin *relatio*. The key texts in which Aristotle discusses this category are *Categories* 7 and *Metaphysics* V.15. However, no corresponding Greek abstract term occurs in these texts. Rather, Aristotle speaks of that which is *πρὸς τι*, “towards something.” In the Latin translation of the *Categories* made by Manlius Boethius (c. 475–526 CE), this gets rendered simply as *ad aliquid*, “towards something,” or alternatively as *relativum*, “relative.” This is perhaps innocuous enough—Boethius, at least, insists that the two renditions are equivalent (1860: 217b). In a few places, however, he uses neither but translates, perhaps less innocuously, with *relatio*.

The medievals distinguished sharply between a relation and a relative. As a model for this distinction, they took Aristotle's own distinction in the *Categories* between a quality and a quale (*Cat.* 8.10a27–32). Basically, a quality is an accident of certain kind; a quale is such an accident plus a subject of inherence. Similarly, a relation is an accident of a certain kind; a relative is such an accident plus a subject. Paleness is a quality; a pale is a quale. Similarity is a relation; a similar is a relative. The items that Aristotle discusses in the *Categories* and the *Metaphysics* are relatives.

A main concern in the *Categories* is to define the notion of a relative. Aristotle, in fact, proposes two definitions. His second, improved definition goes as follows: “those things are relatives for which being is the same as standing towards something in some way” (*Cat.* 7.8a31–32, trans. Ackrill, modified). For present purposes, Aristotle's point may perhaps be elucidated as follows. To be a human being, say, is to be a mortal rational animal, and that is something that a thing can be independently of other things. To be double, by contrast, is not something that a thing can be all by its lonesome; to be double is to stand toward something else in a certain way (in the ratio 2:1, say). Of course, a human being can be the double of something, namely by standing toward that something in a certain way, but a human being in and of itself is not a relative. If God made everything else disappear, you could still be a human being, but you could not be double, for there would be nothing else for you to stand toward in that way. Things, such as double, that satisfy Aristotle's second definition of relatives were known in the middle ages as relatives according to being (*relativa secundum esse*).

In the *Metaphysics*, Aristotle is not concerned to define relatives, but rather to give a general classification of them. There are, he maintains, three general classes:

Things are relative (1) as double to half and treble to a third, and in general that which contains something else many times to that which is contained many times in something else, and that which exceeds to that which is exceeded; (2) as that which can heat to that which can be heated, and that which can cut to that which can be cut, and in general the active to the passive; (3) as the measurable to the measure and the knowable to knowledge and the perceptible to perception.

(*Metaphysics V.15.1020b26–32, trans. Ross*)

The second class is reasonably straightforward, but there are a few things to notice about the first and the third class. In the first class, Aristotle places not only, as his examples suggest, the terms of ratios of various sorts, but also relatives such as equal, similar, and same. The latter are “numerical relatives” in the sense that they “all refer to unity” (1021a10–14). If, for example, Socrates and Plato are similar, this is because there is a qualitative feature—paleness, say—that they both have in common; their quality is in some sense one. In the third class, Aristotle places a sort of relative that is relative “because something else is related to it” (1021a26–29). The class is somewhat curious, but the medievals took him to mean something along the following lines. Suppose Socrates really knows something. His piece of knowledge is then really related—by conformity, say—to the knowable object, but the knowable object's being related to his piece of knowledge about it consists entirely in that piece of knowledge's being related (i.e. conforming) to it. In this sense, a knowable object is a relative solely “because something else is related to it.” This third class of relatives is worth drawing attention to, because it came to play an important role in certain contexts in the middle ages.

Relations

As Aristotle's definition of relatives suggests, a relation is a certain way of standing toward something else. Medieval philosophers would usually try to capture this by saying that a relation is simply a link (*habitus*), a directedness (*respectus*), or a being toward (*esse ad*).

To get clearer on what they mean, suppose that the following assertion is true: Socrates is pale. What is it about the world that makes it true? A common answer was that it is made true by a particular instance of the accident paleness (a quality) being in the substance Socrates as its subject. Suppose, then, that this assertion is true: Socrates is similar to Plato. What makes this assertion true? Again, one might say that it is made true by a particular instance of the accident similarity (a relation) being in the substance Socrates as its subject. But that can hardly be the whole story. After all, Socrates is not simply similar; he is similar *to Plato*. The standard medieval way of completing the story therefore is to say that, in contrast to his paleness, Socrates' similarity is not an absolute accident of his but an accident that he has with respect to some other substance, in this case Plato. In medieval parlance, the particular instance of similarity in question has Socrates as its subject (*subiectum*) and Plato as its term (*terminus*). This does not mean that there is a relational property, similarity to Plato, that Socrates has, but that there is relation, similarity, that Socrates has to Plato. Thus, the assertion that Socrates is similar to Plato is made true by a particular instance of the accident similarity (a relation) being in the substance Socrates as its subject with Plato as its term. On the standard medieval analysis, then, a relation is a sort of link or being toward that a single substance has, not all by its lonesome, but with respect to some other substance. Indeed, this is the main difference between relations and other accidents such as quantities and qualities: relations require not only a subject of inherence, but also a term.

This construal of relations led to some puzzles. Medieval philosophers were, as we saw, committed to particular instances of relations and in fact held that it is these that inhere in particular substances. It was furthermore commonly assumed that there cannot be several instances of the same accident inhering in the same subject. There cannot, for example, be several instances of the same height inhering in Socrates, since by being the same kind of height and having the same subject, they would be indiscernible. This is sometimes called the principle of instance uniqueness and may be expressed as follows. If an instance i of a given specific accident is in subject x and an instance j of the same specific accident is in subject y , and $x = y$, then $i = j$ (cf. Mertz 1996: 10). Since relations are accidents, the principle seemingly implies that two instances of the same relation cannot be in one and the same subject.

This, however, seems problematic. For suppose that I am taller than both Socrates and Plato and that they are exactly the same height. Certainly, the taller than relation that I have to Socrates is then exactly the same kind of relation as the one that I have to Plato. But it cannot be numerically the same relation instance, since I could lose the first relation without losing the second (if, say, Socrates grew an inch). So it seems that there must be two instances in me of the taller than relation. But what is it that distinguishes the two instances? It is not I, the subject, nor is it the kind of relation that they are instances of, so it seems that it must be the terms or something about them. Medieval philosophers would usually use the fatherhood relation to make this point. If a father has ten sons, Abelard (1079–1142) explicitly says, then there are ten fatherhoods inhering in him. See *Dialectica* 1970: 89.20–27. Some thinkers, however, of which Albert the Great (c. 1200–1280) is an example, seem to have found it troubling that one substance or something about it can somehow individuate a property inhering in another, distinct substance, and so they insisted on the somewhat surprising claim that the principle of instance uniqueness holds even for relations and that the father in question is, in fact, not related to his ten sons by ten numerically distinct fatherhoods. See *De Praedicamentis* IV.10 (2013: 101.45–61), but also Penner (2016).

Relations and Their Subjects

The stipulation that a relation requires both a subject and a term is an attempt to accommodate the essential feature of relations that they serve to connect things, while honoring one of the basic commitments of the ontology, namely the fundamental distinction between substance and accident.

It has been not uncommon since Russell to scoff at this sort of approach. Basically, the claim seems to be, the now standard way of representing relations formally as xRy is not only a powerful logical device, but in fact mirrors the way things are. Thus, when the notation is usually explained as meaning that R holds between x and y , this gets the ontology exactly right. A relation is not *in* the relata; it holds *between* them. See, e.g., McTaggart (1927: 82).

It is important to notice that medieval philosophers were not oblivious to the intuitive pull of this kind of construal of relations. Again and again, they invoke the analogy of a road between two cities (usually the one between Athens and Thebes) in their discussions of relations. See, e.g., Albert the Great, *De Praedicamentis* IV.10 (2013: 100.47–53); Martin of Dacia, *Quaest. sup. Praed.* q. 45 (1961: 207.7–9). Intuitively, a relation is a bit like such a road: it too serves to connect things. Time after time, however, they deny that the analogy provides an accurate picture of the ontology of relations (Brower 2018). One of the more forceful and famous such denials came from Peter Auriol (c. 1280–1322):

Something single that must be construed as a sort of interval between two things does not seem to exist in extramental reality [. . .] both because nature doesn't produce such intervals and because a medium or interval of this sort doesn't seem to be in any of the things as its subject but rather between them where there is clearly nothing that can serve as a subject.

(I Sent., d. 30 (MS 329: f. 318va))

Placing the relation *between* the relata leaves it without a subject of inherence. In other words, a relation will be something that is not in a subject. Assuming that a relation is something that has extramental existence, this would make a relation a sort of substance. But that can hardly be right, and it is certainly not what Peter wants to argue. Rather, he wants to deny the assumption: a relation construed in this way is not something that exists in extramental reality.

Most medieval philosophers agreed with Peter in rejecting this analysis as an ontologically viable option. Similarly, there seems to have been unanimous agreement among them when it came to rejecting another analysis, namely one that takes a relation to be in both relata as its subjects. See, e.g., Aquinas (1929, *I Sent.* d. 27, q. 1, a. 1, ad 2). If Socrates and Plato are similar, such an analysis would go, there is a single relation of similarity that is both in Socrates and in Plato. Again, the reason why medieval thinkers reject this analysis has to do with their basic commitment to particular instances of accidents. Not only can a particular instance of an accident not be in no subject at all, but it cannot be in more than one subject either. Today, this is sometimes called the principle of subject uniqueness, and it may be expressed as follows: if an instance i of a given specific accident is in subject x and an instance j of the same specific accident is in subject y , and $x \neq y$, then $i \neq j$ (cf. Mertz 1996: 10). This principle implies that, like any other accident instance, a single relation instance cannot be in both of the relata as its subjects.

Another analysis tries to get around this problem by saying that the subject of a relation is not actually the two relata taken separately, but rather the two taken jointly. In other words, the move is to allow relations to have collective subjects. If Socrates and Plato are similar, the analysis would go, there is a single relation of similarity that is in Socrates and Plato not as its subjects (plural), but as its subject (singular). Proponents of this analysis of relations use numbers to illustrate their point. In the *Categories*, Aristotle places number in the category of quantity. Quantity, however, is an accidental category, and so apparently numbers also need subjects in which to be. Suppose, then, that you have a pair of kittens in front of you. Here you seem to have an instance of the number two, but what is the subject that this instance is in? It cannot be just the one kitten, because that kitten is not two. Nor by parity of reason can it be the other kitten. Nor again can it be each of the kittens taken separately, both because neither of them is two and because this would violate the principle of subject uniqueness. The only viable answer thus appears to be that the subject is

the two kittens collectively. Construed in this manner, the claim is, there are not actually two subjects—it is not true of either of the kittens that it is the subject of the number two—but just one collective subject. Thus, since there is only one subject and only one instance of the number two involved here, subject uniqueness is not actually violated. This kind of analysis of numbers seems to have been not uncommon in the thirteenth century, but as a general analysis of relations, it too appears to have been almost unanimously rejected. The only medieval philosopher known to have fully embraced a collective subject theory of relations is the mid-thirteenth-century arts master Nicholas of Paris (Hansen 2013).

In the end, then, the medieval philosophers standardly opted for the analysis of relations sketched in the previous section. A relation is a sort of link or being toward that a single substance (the subject) has, but only with respect to some other substance (the term). Another way to explain xRy that is not uncommon in today's literature on relations is to say that xRy means that x has relation R to y . Basically, the standard medieval approach amounts to the claim that this gets the ontology exactly right.

Relations and Their Converses

In the *Categories*, Aristotle is concerned not only to define relatives, but also to discuss certain characteristics that they have. Two of these characteristics are especially important: convertibility and simultaneity.

Convertibility is the claim that for every relative there is what we may call a correlative. Aristotle explains the characteristic as follows:

the slave is called slave of a master and the master is called master of a slave; the double double of a half, and the half half of a double; the larger larger than a smaller, and the smaller smaller than a larger; and so for the rest too.

(Cat. 7.6b28–33, trans. Ackrill)

In keeping with their analysis of relatives, the medievals took this feature to be indicative of the fact that every relation R has a co-relation R^* , what we today would call the converse of R . (Aristotle focuses almost entirely on dyadic relations; the medievals follow suit.)

Simultaneity, in turn, is the further claim that every relative not only has a correlative, but is simultaneous with that correlative. Aristotle explains this characteristic as follows: “there is at the same time a double and a half, and when there is a half there is a double, and when there is a slave, there is a master; and similarly with the others” (Cat. 7.7b16–19, trans. Ackrill). The medievals took this characteristic of relatives to be indicative of the fact that the instantiation of a relation and its converse are strictly simultaneous. If an instance of some relation R comes to exist at some time t in some subject x with respect to some term y , then an instance of the converse relation R^* comes to exist at t in y with respect to x ; and if the instance of R in y to x ceases to exist at some time t , then the instance of R^* in x to y ceases to exist at t .

Suppose, for example, that the following assertion is true: Sophroniscus is the father of Socrates. According to the standard medieval analysis, this assertion is true because there is an instance of the relation fatherhood inhering in Sophroniscus as its subject with Socrates as its term. By convertibility, every relation has a converse, and in the case of fatherhood, the medievals take it, this converse is sonship. By simultaneity, a relation and its converse are intimately connected, so intimately in fact that when an instance of one comes (or ceases) to exist, so does an instance of the other. So the instant Sophroniscus comes to have the relation fatherhood to Socrates, Socrates comes to have the relation sonship to Sophroniscus; and the instant Sophroniscus ceases to have the relation fatherhood to Socrates, Socrates ceases to have the relation sonship to Sophroniscus.

Simultaneity has some interesting consequences. Basically, it means that only things for which there is some time t at which they both exist can be related. This is because relations are accidents and the existence of an accident is dependent on the existence of its subject. Thus, the moment Sophroniscus ceases to exist, the relation of fatherhood he has to Socrates ceases to exist. But what is more, by simultaneity the relation of sonship that Socrates has to Sophroniscus also ceases to exist. In other words, when Sophroniscus dies, Socrates, strictly speaking, ceases to be the son of Sophroniscus. A favorite example of medieval philosophers in this context is the relation of priority and its converse posteriority. Strictly speaking, Adam was not prior to Noah, since there was no time t at which they both existed. See Anonymous D'Orvillensis, in *Cat.*, 340 (Ebbesen 1999). Similarly, I am not really prior to future members of the human race (Aquinas 1929, *I Sent.* d. 26 q. 2, a.1, corp.). In sum, it was common among medieval philosophers to hold that for a relation to really obtain, it requires the actual existence of the relata.

What is it about a relation and its converse that make them have this peculiar intimacy? Most medieval philosophers seem to have taken it as a brute fact about relations, but there were some who appear to have wondered if there was a way to avoid this unexplained connection. One strategy that has received a lot of attention in contemporary discussions of recent years is to say that at the fundamental level, there is actually just one neutral relation, either because a relation is simply identical with its converse (Williamson 1985) or because converse relations are somehow derivative on this more basic neutral relation (Fine 2000). If the cat is on top of the mat, then the mat is under the cat. But, the claim is, although we can represent it in different ways, there is, at the fundamental level, just one relation here.

There were also medieval proponents of this sort of approach, but they certainly do not seem to have been many. Basically, the approach was rejected because of the principle of subject uniqueness. Take the similarity between Socrates and Plato again. Let's assume that there is only one relation here. As the medievals see it, this must be a particular instance of the similarity relation. However, this instance is an accident, so it must somehow be in a subject. But there do not seem to be grounds for saying that its subject is just one of the relata, for by parity of reason, it should be the other. So there appears to be two subjects. By the principle of subject uniqueness, however, if similarity instance i is in Socrates as its subject and similarity instance j is in Plato as its subject, then since Socrates and Plato are distinct subjects, similarity instance i and similarity instance j are numerically distinct instances. So although these relations are instances of the same kind, namely similarity, they are nonetheless numerically distinct.

Of course, if one held that relations have collective subjects, then there is a way to get around this. For one could simply say that there is only one collective subject here, namely the two men, and then by the principle of instance uniqueness, it seems to follow that there is only one similarity instance. For if similarity instance i is in the two men as its collective subject and similarity instance j is in the same two men as its collective subject, then since they are the same kind of relation and have identical subjects, similarity instance i and similarity instance j are numerically the same instance. There are, of course, additional problems that such an approach will have to overcome when it comes to non-symmetric relations such as fatherhood and sonship, but they are perhaps not insuperable. Nonetheless, the approach seems to have been almost unanimously rejected (see Hansen 2016).

That said, there were nevertheless cases where many medieval philosophers insisted that there is only one relation instance involved in two things being related, namely when the relation involved Aristotle's third class of relatives. Here, the idea was that the relation is non-mutual; it simply has no real converse. In such cases, therefore, there is only one relation instance involved, but it is a directionally biased, not a neutral one. It does not accrue to the two relata in an equal way, but is fundamentally had by one relatum to the other. What is more, this kind of relation was of prime importance to many medieval philosophers, since they took the relation between

God and his creation to be of precisely this sort. While every creature has a real relation to God, Aquinas (c. 1225–1274), for example, would say, there is no corresponding co-relation inhering in God (Henninger 1989: 31–39). In such cases, therefore, there was additional, strong motivation for keeping a relation and its converse ontologically distinct.

Relations and Their Foundations

As we have seen, most medieval philosophers seem to have taken the essential connection between a mutual relation and its converse as a brute fact about relations, but one might start worrying that there are some undesirable consequences here. Suppose that Socrates is similar to Plato because both men are pale. There is, in other words, an instance of the quality paleness inhering in Socrates and another instance of the same quality inhering in Plato. In medieval terminology, the instance of paleness in Socrates is the foundation (*fundamentum*) of his relation of similarity to Plato. Similarly, the instance of paleness in Plato is the foundation of his relation of similarity to Socrates.

Now suppose that Socrates walks down to the market place one morning and spends the day pestering people with philosophical questions, while Plato stays at home to work on a dialogue. Being outside all day Socrates gets a tan, whereas Plato remains as pale as ever. Socrates has certainly changed, but what about Plato? For a full-blown realist about relations, a famous example being John Duns Scotus (c. 1266–1308), the answer to this question will be “yes.” According to this sort of view, Plato has really changed because he has lost a relation that he previously possessed, namely the similarity he had to Socrates. That similarity was a real thing (*res relativa*), and so Plato has undergone a real change (see, e.g., Scotus 1982, *Lectura* II, d. 1, q. 5, n. 214; p. 71).

Some might find this puzzling. Can what happens to Socrates really change Plato? How can that be? Indeed, many medieval philosophers rejected this, and they would often refer to the authority of Aristotle to back up their position:

A sign that the relative is least of all a substance and a real thing is the fact that it alone has no proper generation or destruction or movement, as in quantity there is increase and diminution, in quality alteration, in place locomotion, in substance simple generation and destruction. The relative has no proper change; for without changing, a thing will be now greater and now less or equal, if that with which it is compared has changed in quantity.

(Met. XIV.1.1088a29–35, trans. Ross; cf. Phys. V.2.225b1–13)

Applying this to our example, Aristotle clearly denies that Plato has really changed. Sure, there has been real change somewhere, namely in Socrates when he acquired a tan, but Plato has undergone no real change by losing his relation of similarity to Socrates. If you are a realist about relations—and one way or the other most medieval philosophers were—the challenge becomes to find a way to maintain that relations are real without denying Aristotle’s intuitively plausible insistence that it is possible for a substance to come or cease to be related without itself undergoing any proper change.

For many, the starting point for meeting the challenge is the claim that not only some, but all relations are founded on non-relational features of the relata. This was accepted by most, and the point was often expressed by saying that for a relation to really obtain it requires, in addition to the actual existence of the relata, that the relation has a real foundation (*fundamentum in re*). See, e.g., Aquinas (1929, *I Sent.* d. 26 q. 2, a.1, corp). Once this is accepted, the strategy for meeting the challenge is to say that the relation is in some sense the same thing as its foundation.

One proponent of this sort of strategy is Henry of Ghent (c. 1217–1293). According to him, a real relation is not a different thing (*res*) from its foundation. That, however, is not to say that

the relation is simply identical to the foundation (Henninger 1989; Williams 2012). Rather, the relation is a certain way that foundation is. As Henry (1983) puts it:

For this reason I have repeatedly insisted that a relation contracts the reality it has from its foundation, and that in itself it is nothing but a bare link, which is merely a certain mode for a thing of standing towards another, and thus it is not a thing in its own right but only a mode of a thing.

(Quodlibet IX, q. 3; p. 56:85–88)

In Henry's theory of categories, only substance, quantity, and quality count as bona fide things, each of which has its own distinctive way of being (*ratio*). The remaining categories, by contrast, are not in themselves things, but rather additional ways that substances, quantities, and qualities are. So when Socrates loses his tan and becomes his pale old self, Plato will again come to have a relation of similarity to Socrates. This relation is real—it obtains independently of the activity of some human mind—but in acquiring it Plato has not properly speaking changed. Unlike Socrates, he has not obtained some new thing that inheres in him as a subject. Rather, the instance of paleness inhering in him already has come to be in a new way, i.e. toward something else (*ad aliud*). In this sense, relations are real without being things. Compared to someone like Scotus, Henry's approach is modest: relations are things only to the extent that they are ways things are. And yet, even on this more modest approach, a relation would appear to still be a real extramental feature of some entitative standing over and above that of its subject and foundation.

A more radical approach was that of William of Ockham (c. 1287–1347), who forcefully rejected the view that relations are a distinct type of entity over and above substances and their absolute properties. In his ontology, the only category besides substance that has a distinct kind of entity corresponding to it in extramental reality is the category of quality. But again, this does not mean that relations depend on the activity of some human mind:

Socrates is similar to Plato because of absolute things alone, all else excluded be it in extramental reality or in the intellect. And so in extramental reality there is nothing but the absolute things. Since, however, there are several absolute things in extramental reality, the intellect can express them in different ways, in one way by saying precisely that Socrates is pale (and then it has precisely absolute concepts), in another that Plato is pale, and in a third way by saying that Socrates as well as Plato is pale. This it can also do through a concept or intention that is relative by saying "Socrates is similar to Plato according to paleness," for exactly the same is implied by these propositions: "Socrates as well as Plato is pale" and "Socrates is similar to Plato according to paleness."

(Ockham 1979, *Ordinatio I*, d. 30, q. 1; p. 316:14–24)

If you then ask what a real relation such as similarity is, there are, according to Ockham, two ways of replying, both of which are true:

I say that (1) similarity is either a relative concept signifying several things collectively or (2) it is the several absolute things collectively; as a people is several men and no man is a people, so similarity is several pale things and no pale thing is a similarity.

(Ockham 1980, *Quodlibet VI*, q. 15; p. 639:70–73)

What (2) says is that the relation is actually there in extramental reality, but it is nothing over and above the relata with their absolute properties. Once you have them, you have the relation. Nothing more is needed, and yet this does not mean that the relation is not there, that it isn't

real. In the case of similarity, the relation just is the relata with their respective palenesses. But, importantly, that is not to say that one pale thing is a relation. Rather, a relation is a bit like the tango: it takes two.

Another forceful opponent of more robust approaches was Peter Auriol. We have already seen him reject that a relation construed as something existing *between* the relata can be found in extramental reality. This in itself was not uncommon. What was more uncommon was his insistence that replacing the “between” with a “towards” makes no difference. In order to relate, he insists, a relation has to, so to speak, reach beyond the subject to the term, and no matter how you cut the cake, the only way in which it can do so is to be between them or to be in both of them and thus somehow divided between them, neither of which is feasible. And so,

taking a relation for that which it formally and directly means, namely a link which exists in the foundation and mediates between the foundation and the term, and which is nothing but a being towards and directedness, it itself as such does not exist in reality if one excludes all intellectual and sensory apprehension, but it exists in the soul objectively, so that in extramental reality there is nothing but the foundations and the terms, while the link or connection between them comes from the cognitive soul.

(MS 329, I Sent. d. 30; f. 321ra–b)

On Peter’s view, connections between things, that is to say, relations, have actual existence only in the mind. Actual relations are concepts. Peter takes care to stress, however, that this does not mean that relations are mere figments of the imagination. Although relations do not *actually* exist in extramental reality, they do so, he insists, *potentially*. What he means by this is that if Socrates and Plato are both pale, then an intellect considering them as such will immediately apprehend them as indistinct in this regard, and their similarity is just this conceived indistinctness. Another way he puts it is that the relations are in extramental reality foundationally. Like Ockham, Peter is clearly attempting to give our relational talk and thought a solid basis in extramental reality without positing corresponding relational entities “out there” over and above the relata and the foundations in them. And clearly, on such a view, a thing can come to be related without itself undergoing any proper change.

Conclusion

As should by now be clear, there was no one medieval theory of relations. There were some shared basic commitments springing from Aristotle’s categorial theory and its ontology of substance and accident, and these commitments did motivate a certain construal of relations. Still, there was plenty of room for debate and lots of conceptual space for articulating a plethora of divergent views about the precise nature and ontological status of relations. The medieval literature on relations is vast, rich, and varied, and large parts of it remain more or less unexplored. But from what is known of the story so far, it is to be expected that for pretty much every view that someone held, there was someone else who found a reason to disagree. Medieval philosophers were, after all, philosophers.

Further Reading

A good study of medieval theories of relation is Henninger (1989) which focuses on the period 1250–1325 and gives a lucid and detailed discussion of the views of Thomas Aquinas, Henry of Ghent, Richard of Mediavilla, John Duns Scotus, Henry of Harclay, William of Ockham, and Peter Auriol. In the case of several of these major theological thinkers, there are also detailed

studies in either book or article form. Thus, for example, for Aquinas one might consult Krempel (1952); for Henry of Ghent, Williams (2012); and for Ockham, Adams (1987) and Beretta (1999).

The periods before and after the 75 years Henninger focuses on have received less attention. For the period before Aquinas, one might consult Marenbon (2018) on the period up to c. 1100, Brower (1998) on Abelard, Erismann (2014) and Martin (2016) on the twelfth century, Brower (2001) on Albert the Great, Hansen (2012) on John Pagus, Hansen (2013) on Nicholas of Paris, Thom (2013) and Hansen (2016) on Robert Kilwardby. Marmo (2013a, 2013b) gives an introduction to the views of the late thirteenth-century arts master and theologian Raldulphus Brito. For the period after Ockham, a good place to start is by looking at Conti's article on Walter Burley in Carraud and Porro (2014), and for late Scholasticism, see Penner (2012, 2013) on Francisco Suárez and Rodrigo de Arriaga.

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9

POWERS

JT Paasch

The subject of this chapter is causal powers—or, as some philosophers today like to call them, “dispositions.” Powers (or dispositions) are roughly just the capabilities and capacities that things have to behave in certain ways. For instance, I can raise my arm, think through complex issues, make choices, and so on. These are all things I have the power to do, and such powers are what the scholastics call *active powers*, or powers to act.

But there are not just powers for doing things. Most objects can have various things done to them as well. Wine glasses can be shattered, my arm can be raised (by me, or by a pulley system), and so on. The capacities to undergo such things are, in one way or another, capacities to behave in certain ways as well, so they count as powers too. They are what the scholastics call *passive powers*, or powers to be acted upon.

What exactly are powers, be they active or passive? Scholastic philosophers spent a good deal of time discussing the matter. Anyone who has read scholastic texts will recognize a Latin word that crops up quite often, namely *potentia*, the scholastic term for “power.” Other terms are sometimes used too, like *vis*, or *virtus*. Whatever the label, the concept of power plays an important role in many scholastic discussions.

Despite the pervasiveness of the concept, there was no “standard” medieval view about powers. Rather, there were a number of competing theories about the nature of powers, much as there is today in the contemporary philosophical literature.

To illustrate the diversity of theories, I will present what four scholastic authors have to say about a particular question they debated regarding powers. Those authors are Thomas Aquinas (1225–1274), Henry of Ghent (1217–1293), John Duns Scotus (1266–1308), and William Ockham (1285–1347). The debate I will focus on centered around this question: are the powers of the human soul the same as, or distinct from, the essence of the soul?

The soul was a *locus* of debate about powers because the scholastics take the soul to be a substantial form that brings along with it a variety of powers. For instance, it provides powers for basic biological functions. It also provides sensory powers, like sight and smell, along with the ability to synthesize sense data into images and store that in memory. Finally, it provides humans with intellect and will. (For the background in Aristotle, see Johansen 2012.)

In what follows, I will explore what each of the aforementioned authors believes about the ontology of powers, in the context of the human soul. As I proceed, I will note how these authors answer three particular ontological questions:

- 1 When we speak of a power of the soul, what do these authors think we are referring to (or as these authors sometimes put it, what are we designating when we speak of a power)?
- 2 What sort of entities are the soul's powers? Are they qualities? Relations? What category do they fall under?
- 3 To use the terminology of Ryle (1949), are the soul's powers single-track or multi-track? A single-track power can bring about only one type of effect, while a multi-track power can bring about more than one type of effect.

As we shall see, Aquinas, Henry, Scotus, and Ockham each provide different answers to these three questions. By focusing on these three questions and these four authors, I do not mean to imply that this is all there is to the story. But I do hope that I can at least illustrate some of the diversity on this topic that is present in the scholastic tradition.

Thomas Aquinas

I begin with Thomas Aquinas, who holds that the soul's powers are not the same as the soul's essence. For convenience, I will discuss the view that Aquinas presents in *Summa Theologiae* 1.77, although as I will note later, Henry, Scotus, and Ockham rely on Aquinas's similar discussion from *Quaestiones Disputatae de Anima*, q. 12.

For Aquinas, the essence of the soul is that it is the substantial form of a human being. What is the substantial form of a human being? To highlight certain aspects of Aquinas's take on the matter, I want to cast the issue in the following way.

Imagine the production of a living organism as a kind of construction process: in a series of passes, bits of matter are acted upon and transformed into progressively more complex states. At the end of the process, you have the completed organism. For our purposes here, we can think of the substantial form as the full set of actualizations that are needed to bring that organism to completion.

There are two things to note about substantial forms under this description. First, the substantial form is the *goal* of the construction process. So it is not some intermediate state on the way to a further state. On the contrary, it is the final state that the production process is aimed at realizing. As Aquinas puts it:

Insofar as the soul is a [substantial] form, it is not an actualization that is directed to some further actualization. Rather, it is the final goal of the production.

(*ST* 1.77.1.resp., *Marietti* 1948: 370a)¹

Second, no part of the substantial form can lie dormant or be inactive, for that would mean the organism is not yet completed. For example, the organism cannot be completed until its heart is actually beating. So every part of the substantial form must be fully activated and “switched on,” so to speak. To quote Aquinas's terse way of putting this:

By its very essence, the soul [i.e., the substantial form] is [entirely] *actus*.

(*Ibid.*)²

What about the powers of the soul, e.g. powers for digesting or thinking? Are they part of the substantial form? Aquinas says no. If they were, they would be activated—always “switched on,” so to speak—but they clearly are not. I only sometimes digest, for example. So they cannot be part of the substantial form.

If the essence of the soul [= the substantial form] were the direct source of its activities, then whatever has a soul would always be performing its vital activities . . . But we find that a thing which has a soul is not always performing its vital activities . . . so the essence of the soul is not the same as its powers.

(*Ibid.*)³

The argument here hinges on the notion that the substantial form contains only what completes the organism. As Aquinas sees it, if (say) digesting were part of the substantial form, then that would entail that the organism would not be completed until it digests something, and it would cease to be completed any time it is not digesting. Clearly, that is absurd. An organism is completed prior to doing to any actual digesting. Its completion does not depend on the activity of digestion, in the way that its completion *does* depend on (say) a continuously active heartbeat. In fact, an organism need never digest anything at all (though, of course, it would then live a short life).

This point was controversial. For why should the substantial form include only things that are *active*? Why not think that part of what is involved in bringing an organism to completion is endowing it with certain vital powers which may (but need not always) be activated? As we shall see, Henry, Scotus, and Ockham are perfectly happy to say that the powers of the soul are included in the substantial form, despite the fact that they are only sometimes active.

In any case, here we have a partial answer to the first question, namely: when we speak of the soul's powers, what are we referring to? According to Aquinas, we do not refer to the soul's essence (the substantial form). Instead, we are referring to something outside the substantial form.

If powers are distinct from the substantial form, then what sorts of entities are they? As is well known, the scholastics call any form or property of the organism that is outside its substantial form an "accident," so for Aquinas, the soul's powers are accidents. Indeed, according to him, they are particular kinds of accidents, namely qualities:

Since a power of the soul is not its essence, it must be an accident, and this in the second species of quality.

(*ST 1.77.1.ad.5, Marietti 1948: 370b*)⁴

For Aquinas, some of these are qualities of parts of the composite, and some are qualities just of the soul itself. For example, the power to digest is a quality of the digestive system, and the power to see is a quality of the eyes. By contrast, the intellect and will are qualities of the soul itself.⁵ But whichever of them we are talking about, we now have an answer to both the first and the second questions: when we speak of powers, what are we referring to, and what kind of entities are they? In the case of the soul, Aquinas says that we are referring to qualities.

These powers may not be part of the substantial form, but nevertheless they are necessarily possessed by every human being. Indeed, it is hard to imagine a completed, healthy human being who would not have the power to digest or think. So even though these powers are qualities, they are not the sorts of qualities that humans may or may not have. On the contrary, they are what the scholastics call *propria*—i.e. naturally occurring qualities of every human being.

A *proprium* does not belong to the essence of a thing, but it is caused by the essential principles of the species, whence it stands midway between the essence [of the soul] and the [non-necessary] accidents [of the organism], as was said. In this way, the powers of the soul can be said to stand midway between the substance and its [non-necessary] accidents, as naturally occurring properties of the soul.

(*ST 1.77.1.ad.5, Marietti 1948: 370b*)⁶

Notice that Aquinas says these qualities are *caused* by the essential principles of the species. An interesting question is: in what sense, exactly? Here, Aquinas is somewhat vague. He is clear that these qualities are not produced in humans by external agents. Rather, they are somehow produced internally by the organism that possesses them.

Insofar as the subject of such an accident actually exists, it produces that accident. I say this about the *proprium* accident, for with respect to an extraneous accident, the subject can only receive it, since such an accident is produced by an external agent.

(ST 1.77.1.6.resp., Marietti 1948: 374a)⁷

But how exactly does the production of these powers happen? At this point, Aquinas simply resorts to a metaphor, and says that the powers *flow* from the soul, as from a source.

Whence it is clear that all powers of the soul, whether their subject is the soul itself or the composite, flow from the soul's essence [= the substantial form] as from a source.

(Ibid., Marietti 1948: 374a–b)⁸

It is tempting to think that what Aquinas means is that these powers are somehow grounded in the soul, through an explanatory but non-efficiently-causal grounding relation. But Aquinas does use causal language here. Note how he says these powers are “caused” or “produced” (see also ST 1.3.4.resp.). This can suggest that the relevant kind of causality is efficient causality. If that were right, then as soon as the soul exists, it would automatically spawn its powers, by directly (efficiently) causing them. But of course, we would then have to ask: where does the soul get the power to do *that*?

Let me turn now to the third question: are the soul's powers single-track or multi-track? According to Aquinas, the soul's powers are different in kind, and they are sorted into kinds by the activities they give rise to:

A power, insofar as it is a power, is directed to an activity. Whence, the account one gives for a power must be taken from the activity to which it is directed, and by consequence, it is necessary that the account one gives for powers gets diversified as the account one gives for activities gets diversified.

(ST 1.77.3.resp., Marietti 1948: 371b)⁹

When Aquinas speaks of activities here, is he speaking of activity *types*, or activity *tokens*? This question is relevant because, as we shall see, Ockham will attack this particular point.

I assume that Aquinas is thinking of types, rather than tokens. Otherwise, he would have to say that there is a distinct power for each particular activity token, and he does not seem to speak this way. So, I will assume that for him, there is in a human one power for thinking (not a separate power for each separate act of thinking), which is different in kind from that human's power for willing.

Given this, it follows that each of the soul's powers must be distinct from all of the others, since they are powers for different types of activity. As Aquinas puts it in the *Quaestiones Disputatae de Anima*:

[That the essence of the soul is not the same as its powers] is clear from the diversity of the soul's activities, which are different in kind, and cannot be reduced to one direct source . . . But since the essence of the soul is a single source, it cannot be the direct source of all of its activities. Rather, it must have many different powers corresponding to its different activities.

(QDA 12.resp., Leonine 24.1: 110.210–220)¹⁰

Aquinas assumes here that one thing cannot give rise to different kinds of activities, which allows him to conclude that there must be a distinct power for each of the soul's activity types. But this too was controversial. As we shall see, Henry, Scotus, and Ockham see no reason why they should grant this assumption. Nevertheless, this makes it clear that, according to Aquinas, the soul's powers are single-track powers. For as he sees it, each power is a power for a single type of activity.

To summarize Aquinas's view, we can say that, for him, the soul's powers are distinct items that are outside the substantial form. In particular, they are qualities, which necessarily come along with every human soul. Moreover, they are single-track powers, each responsible for a single type of activity. For more on Aquinas's account of the soul's powers, see Pasnau (2002), Cross (2008), King (2008), Wood (2011), and Vucu (2020). For other discussion of Aquinas on souls and powers, see Kainz (1972) and Stump (2003: ch. 6).

Henry of Ghent

I turn next to Henry of Ghent, who discusses the soul and its powers in *Quodlibet* 3.14. There, he claims that every power cannot be distinct from the essence of the thing it is rooted in, on pain of an infinite regress.

Suppose a power were a distinct quality, attached to a form. What would provide that form with the capacity to have that power attached to it? A further power or capacity? And what about that one? A further power or capacity? This cannot go on forever, so at least some powers must be identified with the forms they are rooted in. As Henry puts it:

If a power were really different from the very essence [of the form it is rooted in], it would be something that attaches to the essence [of that form], which would be receptive to it. But this could only be through a passive power [i.e., a receptive capacity], which is [something that should be identified with] the very essence [of that form], else this would go on forever.
(*Quod. 3.14, Bad. 1518: 67rR*)¹¹

To illustrate this, consider the heat of a flame. Henry points out that surely the essence of heat and its power to heat are not distinct, for otherwise there would be an infinite regress:

Fire heats by its heat (as its power for heating), but here the essence of its heat (a passible quality) is not different from the power itself. On the contrary, the essence of the heat is that very power to heat in the flame. It is not some [further quality] naturally added to it. For otherwise this would go on forever . . . If the power were not really the essence itself, it would be something added to it, and then there would be the same question about it.
(*Quod. 3.14, Bad. 1518: 66vP*)¹²

The same goes for substantial forms. As Henry sees it, there is no reason to think that the powers which necessarily come along with substantial forms need to be distinct from the essence of those forms.

Whence, even in substantial forms which are actualized and are not apt to exist or act by themselves if separated, there is nothing incompatible about the essence of those things being the very power by which the composite properly functions, with such activity belonging to it *per se* through the nature of its substantial form. For a composite should act not only by reason of its accidental forms, which is how a flame heats, but also by reason of its substantial form, which is how a flame generates [another] flame.

(*Quod. 3.14, Bad. 1518:66vP*)¹³

In direct opposition to Aquinas, Henry identifies a thing's powers with its substantial form, rather than distinct qualities:

In terms of its substance, the power through which something performs its proper and essential operation is the substantial form of that thing. For the substantial form is directed not only to the actualization of giving being to the composite (through which it is in the final state of its production), but also to the actualization of its operations, and this through its essence, rather than some [quality] added to it.

(*Quod. 3.14, Bad. 1518: 66vP*)¹⁴

This reveals Henry's answer to the first question: when we speak about the powers of the soul, what are we referring to? In contrast to Aquinas, Henry thinks that we are referring directly to the soul's essence, which is to say the substantial form.

It is obvious that Henry is targeting Aquinas here, since his language so directly echoes the concepts that Aquinas discusses. And indeed, in *Quodlibet* 3.14, Henry quotes verbatim from Aquinas's *Quaestiones Disputatae de Anima* q. 12 more than once.¹⁵

However, is Henry's regress argument a refutation of Aquinas's view? It is hard to see how it could be. Aquinas agrees that a power is just a quality, and not some *further* item beyond that quality. So Aquinas would agree that, say, the power to heat is not some further item beyond the heat quality.

Because of this, Cross (2008) suggests that Henry might have misunderstood Aquinas's view, and perhaps that is right. However, perhaps Henry is arguing that, if we have no reason to think that the power and the quality are extensionally distinct (a point that Aquinas agrees with), then we have no reason to think that the power and the essence of the soul are either.

Either way, Henry is begging the question. For Aquinas would simply counter that, although there is no reason to think that the power and the *quality* are extensionally distinct, he does indeed have a reason to think that the power and the *substantial form* are. As I noted earlier, Aquinas assumes that whatever is in the essence of the soul must be actualized, and that compels him to separate out the soul's powers. What Henry's argument shows is only that Henry rejects that assumption.

What about the second question: what kinds of entities are the soul's powers? According to Henry, powers are relational in nature.

Every power, insofar as it is a power, is rooted in something with respect to something else.
(*SQO 35.4, Wilson 1994: 37.76–77*)¹⁶

Why are powers relational? For Henry, it is because we speak about the soul as the *source* of activity, and conversely, we speak about the activity as the *result* of that power. So, we are speaking about a relation:

A source, insofar as it is a source, is not spoken of in terms of substance, but only in terms of a relation, and a relation implies a reference to another, as the result.
(*SQO 35.4, Wilson 1994: 37.67–69*)¹⁷

Henry thinks that this relational characteristic of powers is the defining mark of a power. For Henry, the quiddity of a power consists precisely in its connection with the activities for which it is a power:

Regarding the nature of a power (insofar as it is a power), it is something that is spoken of with respect to some activity, so it is not some non-relative thing, but rather just this connection with activity that is rooted in a non-relative thing.
(*SQO 35.2, Wilson 1994: 15.62–64*)¹⁸

For Henry, this means that when we speak about powers, although extensionally we are picking out the forms they are rooted in, we are doing so only insofar as they are linked to the activities for which they are powers.

To use one of Henry's examples, I can talk about heat as a quality, or I can talk about heat as a power (insofar as it is used to heat other things).

If [a bit of] heat separated [from a flame] were able to heat [other things] by itself, it would only be a quality in terms of its substance, and it would only be a specific power . . . with respect to an act of heating: it would go into action whenever something heatable came near, and it would cease its action when the heatable thing disappeared.

(*Quod. 3.14, Bad. 1518: 71rF*)¹⁹

Similarly, although the will is extensionally the same as the substance of the soul, the soul qualifies as a willing-power only insofar as it is related to acts of willing, which it performs naturally whenever good things are presented to it in thought:

The will is a natural power in the soul and is nothing but the substance of the soul, but it comes about only from a natural constraining and relation to the act of willing the good as good (either an unqualified good or an apparent good), which it necessarily has to will naturally when it is presented to it in thought . . . And when something good is not presented to it as an object . . . it cannot will at all.

(*Quod. 3.14, Bad. 1518: 71rF*)²⁰

Likewise, although the agent intellect is extensionally the same as the substance of the soul, the soul qualifies as an abstracting-power only insofar as it is related to acts of abstracting intelligible content from mental images:

Similarly, the agent intellect is a natural power in the soul and is only the substance of the soul, but it comes about from a natural constraining and relation to the act of abstracting intelligible species from a phantasm when they are presented to it, so that it cannot fail to abstract them.

(*Quod. 3.14, Bad. 1518: 71rF*)²¹

So it is the relation that the soul has to these different activities that makes the soul a power for those things. The soul's powers are the soul, *insofar as* it is related to those different activities.

In fact, Henry says that we can think of powers in terms of matter and form, where the root of the power plays the role of matter and its relation to the activity plays the role of the form.

The term "power" signifies a property as it is pointing outwards at something, so that in its significate it includes the essence [of the thing], having the character of that property. Hence, the significate is composed, as it were, from two things, namely from the subsistent thing itself, which it signifies quasi-materially, and that property, which it signifies quasi-formally.

(*SQO 35.8, Wilson 1994: 78.66–70*)²²

Caution is in order here. To describe the soul's substance and its relation to activity as the "matter" and "form" of the power might lead one to think that Henry believes the relation is a distinct item, separate from the soul itself. But for Henry, relations are not distinct items separate from their bases. They are just special modes of existence. A thing *x* is related to another thing *y* when

x looks outward or points at y , and this “pointing” is just an aspect of the way that x exists, rather than a distinct entity in its own right.²³

So in the case at hand. When Henry speaks about the soul insofar as it is related to one of its activities, he is envisioning the soul only insofar as it exists in a state where it points outward at that activity. Henry’s answer to the second question is thus that the soul’s powers are *relations*, but we should understand this in the light of Henry’s ontology of relations. For Henry, the soul’s powers are extensionally just the soul itself, insofar as it is related to (i.e. pointing at) the activities for which it is the source.

What about the third question: are powers single-track or multi-track? Henry is clearly an advocate of multi-track powers. For him, the same soul is the source of multiple activities, and this is due not to the fact that the soul itself is divided up into different powers, but rather because it is related to different activities.

That there is so great a diversity and distinction of powers of the soul is not on account of some real diversity that they have on the side of the soul, but only on account of the diversity of constraints in the substance of the soul that occur through it being related to diverse activities. And because of this it gets the names of diverse powers.

(*Quod. 3.14, Bad. 1518: 68vZ*)²⁴

The soul itself is one thing, and the activities are different things, and the soul is the single source for all of those activities.

The soul’s substance is one in terms of reality, but in terms of diverse being and in terms of diverse determinations it is appointed the character of diverse intellectual and sentient powers, since in its root the power is nothing in it but its simple substance. Considered in itself, it is the essence or substance and form of the animated being, but considered in terms of diverse being through diverse determinations and operations for diverse actions and diverse objects, it is said to be diverse powers, which adds nothing beyond its essence except a relation to the acts that are diverse in kind.

(*Quod. 3.14, Bad. 1518: 67rS*)²⁵

In sum, Henry sees no reason to identify the soul’s powers as distinct items outside the essence of the soul. On the contrary, the soul is the sole source of its various activities. Hence, we find in Henry quite a different account than we find in Aquinas. For more on Henry and powers, see Cross (2008), Wood (2011), Paasch (2012: chs. 9 and 10), and Vucu (2018).

John Duns Scotus

I turn now to Duns Scotus. In his *Quaestiones super Libros Metaphysicorum Aristotelis* 9.5, Scotus attacks Henry’s idea that the relation between a power and its effect could somehow be a constitutive component of that power.

It is worth pointing out that Scotus agrees with Henry that these concepts imply relationships. Take the notion of being the source of some effect. This implies a causal relationship between the source and the effect, such that the source in some way brings about the effect.

And so it is clear that the term “source” [*principium*] implies essentially the relationship of causing [*principiationis*].

(*Meta. 9.3–4, n. 19, Andrews 1997: 542.13–14*)²⁶

Moreover, the abstract notion of causing can be used to designate different things. You can speak of what is doing the causing (the *quod*), or you can speak of that through which it does the causing (the *quo*). For instance, when a flame heats a pot of water, the flame is the *quod* (it is the thing doing the heating), but its heat is the *quo* (the heat is that through which the flame does the heating).

From the relationship [between source and effect] signified in the abstract, which is called “causing” [*principiatio*], different things are designated. For example, the “that which” [*illud quod*] causes and the “that through which” [*illud quo*] it causes.

(*Meta. 9.3–4, n. 19, Andrews 1997: 542.1–3*)²⁷

The same holds for terms related to power.

Entirely similarly, it should be said that *potentialitate*, *potentia*, and *potente* imply the same relationship. The first abstractly, the other two concretely, but in different ways insofar as the relationship is meant to name the direct and indirect basis or subject [i.e., the *quo* and the *quod* of the effect] in different ways.

(*Meta. 9.3–4, n. 20, Andrews 1997: 543.9–13*)²⁸

So Scotus agrees that the notion of power implies a causal relationship. If you put a pot of water over a flame, Scotus would point and say, “look, there’s a real causal connection there.”

However, as Scotus sees it, Henry’s view implies that this relation is an essential *constituent* of a power. After all, on Henry’s view, the heat in a flame is a power for heating only insofar as it is heating something. Without that, it is just a quality.

For his part, Scotus assumes that the essential constituents of a power must be naturally prior to any effects the power causes. It is obvious that he assumes this because of the way he words the initial question. He opens *Quaestiones super Libros Metaphysicorum* 9.5 with these words:

Next it is asked whether a power (be it active or passive), *insofar as it is naturally prior to its effect*, essentially includes some relation.

(*Meta. 9.5, Andrews 1997: 559.4–5, emphasis mine*)²⁹

Scotus repeats this point at various places. For instance, he asks again:

If some relation does belong to the nature of an active power *insofar as it is prior to the effect* [then what would that relation be?]

(*Meta. 9.5, n. 9, Andrews 1997: 561.18–19, emphasis mine*)³⁰

So Scotus is clearly assuming that the essential constituents of a power must be naturally prior to any effects the power causes. As he puts it more generally:

What is appropriate is that the source [of the effect] has in itself completely everything needed for causing its effect.

(*Meta. 9.5, n. 37, Andrews 1997: 573.4–5*)³¹

What exactly does Scotus mean by natural priority? One thing is naturally posterior to another if the other depends on it for its existence, but not vice versa. As he explains elsewhere:

The prior is said to be that on which something depends, and the posterior that which depends on it.

(*De Primo 1.8, Wölter 1966: 5*)³²

Scotus appeals to Aristotle here, who famously said that one thing is naturally prior to another if the one can exist without the other and not vice versa. As Scotus explains:

I understand the sense of prior here as Aristotle did in *Metaphysics* 5, where he shows (following Plato) that what is prior in nature and essence can exist without the posterior, but not vice versa. (*Ibid.*)³³

But we need to be careful. It may be tempting to think that Scotus is simply saying that something is naturally prior to another if it can exist without whatever is naturally posterior to it existing. This would imply that if two things are necessarily simultaneous, the one cannot be naturally prior to the other, since the one would never exist without the other.

But Scotus makes it clear that this is so. Even in cases where one thing *x* necessarily causes another thing *y*, so that there is no scenario in which *x* would ever exist without *y*, Scotus still thinks that there is natural priority, since *y* depends on *x* for its existence but not vice versa. As he explains:

I understand this to mean that, even if the prior thing were to necessarily cause the posterior thing and so could not exist without it, still this is not because it needs the posterior thing for its existence, but rather the other way around. (*Ibid.*)³⁴

What sorts of things are related as naturally prior and posterior? Relations are a paradigmatic case. Like many scholastic thinkers (including Aquinas and Henry), Scotus believes that relations supervene on the things they relate, and depend on them for their existence (there cannot be relations without things to relate).³⁵

For instance, take two white balloons. Since they are both white, they are similar in color. That relation (of similarity) is based on the non-relative qualities of those balloons (e.g. their respective white colors). The relation is naturally *posterior* to those qualities, since the relation depends on those qualities for its existence. However, the converse is not the case. The colors are naturally *prior* to their similarity, since they do not depend on that relation for their existence.

For Scotus, the relation between a cause and its effect is just the same. A causal relation depends on there being a cause and an effect. If there were no effect, for instance, there would be no causal relation. Of course, the relation is simultaneous with the effect. As soon as the cause produces the effect, there is a causal relation there. But the point is not a point about temporal priority. It is a point about dependence.

This relation [of causing] is simultaneous in nature with being caused . . . and it is posterior in nature to what is affected [or caused], that is, to that on which the relation of being caused is based.

(*Meta. 9.5, n. 10, Andrews 1997: 561.2–4*)³⁶

With that, Scotus can state his critique of Henry's view: how can something that is naturally *posterior* to the effect be a constituent of the power that is used to *produce* that effect? Surely, whatever constitutes the power must be naturally *prior* to its effect. Hence, no such relationship could ever be a constituent of the power. As Scotus puts it when speaking of active powers:

This relation that is [supposedly] intrinsic to [as an essential constituent of] the active power must be prior in nature to that which is caused, [which is impossible]. Therefore, no such relationship can be found [as a constituent of an active power].

(*Meta. 9.5, n. 10, Andrews 1997: 561.6–8*)³⁷

As Scotus sees it, the idea that any relation between a power and its effect is an essential constituent of a power cannot be correct, because the relation shows up on the metaphysical scene too late, as it were, to do any constituting.

It is perhaps worth noting that, for Scotus, such relations do not *explain* very much either. As Scotus points out elsewhere, if you asked me why two white things are similar, it would not help much if I said, “because they are similar.” But it would help if I said something like, “because they are both white,” for then I would be appealing to the basis for their similarity. And the same goes for powers.

Whence, when we ask why things are similar, we do not ask why they are similar *per se primo modo*, because in that sense they are similar because of their similarity. Rather, we ask why they are similar *secundo modo per se*, i.e., we ask whether they are similar by their whiteness, or some other form. Whence, we ask about the basis of their similarity. Likewise, when it is asked, “what is a power of the soul,” one is not asking for the relation which the power implies. Rather, one is asking for the basis.

(*Lect. 1.7.un.*, n. 35, *Vat. 16*: 485.9–21)³⁸

To recall the notorious quip by Molière, why does opium make one sleepy? It does not help much to say “because it can make you sleepy.”³⁹ But it does help if you point to, say, chemical and physiological factors that are the basis for this effect.

In any case, since the relation cannot be an essential constituent of a power, Scotus concludes that the power must be precisely the non-relative constituent of the agent which the causal relation is rooted in. When speaking of active powers, for instance, he says:

Hence, it is precisely the non-relative thing [e.g., the heat] that is essentially the active power, and not the relation alone . . . Therefore, it is precisely this form [i.e., the heat] that is the active power.

(*Meta. 9.5*, n. 8, *Andrews 1997*: 561.13–14, 16–17)⁴⁰

For Scotus, when we speak about powers, we are designating or picking out not the relation, but rather the thing on which that relation is based.

Just as we commonly take other concrete terms [for forms] to refer to their subjects (insofar as those subjects possess the forms [referred to by the concrete terms in question]), so also when we speak of a “power,” we do not understand the relation, but rather the subject on which the relation is based.

(*Meta. 9.3–4*, n. 20, *Andrews 1997*: 543.13–16)⁴¹

Here, we have Scotus’s answer to the first question: what are we referring to when we speak of the soul’s powers? On Scotus’s view, when we speak of the powers of the soul, we are designating the soul’s essence.

It may seem to follow from this that Scotus is a multi-tracker about powers. For if the essence of the soul itself is the source of all of its activities, then it would be a multi-track power. In the *Reportatio* 2.16, Scotus points out that, if one were so inclined, one could reasonably defend such a view:

I say it could be maintained that the intellect and will are not really distinct things, but rather are entirely the same things and are the same nature. That is, one could maintain that the essence of the soul is entirely uniform as a thing and a nature, and is the source of many operations without there being any real diversity of powers in it.

(*Rep. 2.16*, n. 17, *Wadding 11*: 348a)⁴²

Scotus himself says that he does not opt for this view (though cf. van den Bercken 2015 and Cross 2014: ch. 7). Instead, he claims that the soul's powers are formally distinct components that are somehow identified with (as essential constituents of) the soul's essence:

The powers are not the same formally or quidditatively, not with each other nor with the essence of the soul itself. But neither are they distinct things from the soul. Rather, they are the same by identification [*idem identitate*].

(*Rep. 2.16, n. 18, Wadding 11: 348b*)⁴³

What does Scotus mean when he says they are the same by “identification”? This is the terminology he uses to speak of his famous formal distinction. Formally distinct items are items that have distinct definitions or quiddities, but yet are bound or fused together in a single object.⁴⁴

So for Scotus, the powers of the soul are distinct items, but they are tightly bound together, in virtue of them all being contained in the essence of the soul. To use Scotus's terminology, they are “unitively contained” in the soul's essence:

I say that the powers [of the soul] are not other than the soul, but rather are unitively contained in the essence of the soul.

(*Rep. 2.16, n. 18, Wadding 11: 348b*)⁴⁵

With that, we have Scotus's answer to the second question: what kind of entities are the soul's powers? For Scotus, they are formally distinct components of the soul. We also have the answer to the third question. For Scotus, the soul's powers are single-track. For example, the intellect is one formally distinct power, and the will is another formally distinct power, even though the two are bundled together inside the same soul.

To summarize, Scotus holds that the powers of the soul are formally distinct constituents of the soul's essence, and qua powers, they are naturally prior to any of the effects they produce. For more on Scotus and powers, see Normore (1996), King (2001, 2008), Cross (2008), Paasch (2012: ch. 12), Cross (2014: ch. 7), van den Bercken (2015), and Vucu (2018).

William Ockham

Finally, I turn to Ockham. In the *Quaestiones super Libros Sententiarum* 2.20, Ockham rejects Aquinas's view that powers must be outside the essence of the soul because they are not always exercised.

Recall that, for Aquinas, the soul's powers must not be contained in the soul's essence because they sometimes are and sometimes are not activated after the organism is completed. Ockham rejects this. As he sees it, there is no reason to think that the *powers* are later or secondary actualizations of their possessors, simply because their *activities* are. It is perfectly reasonable to think that unexercised powers are themselves fully present or fully realized in the essence of the soul, as part of its primary actualization:

If you say that thinking is a secondary actualization . . . and therefore it must be different from the primary actualization . . . then I say that thinking is indeed a secondary actualization, because it presupposes some prior actualization in that in which it occurs—say, [there must be] a power, or habit, or at least some other things—whereas the primary actualization is not like this . . . Still, in no way is thinking called a secondary actualization because its existence is more *in fieri* or *in fluxu* than a power or habit, which are primary actualizations, because they do have all of their existence all at once.

(*Quaest. in Sent. 2.20, OTh 5: 431.5–14*)⁴⁶

With regard to Henry's view, Ockham follows Scotus. For Ockham as much as for Scotus, relations cannot be constitutive of powers.

Ockham provides a number of arguments for this claim, but one is worth mentioning. Imagine that you are a free-floating human soul, and you are the only thing that exists. In such a world, you cannot think or will, since there is nothing to think about or will. But surely you would still have the *power* to think and will:

Neither [can this alleged] relation [that supposedly constitutes a power] be a real relation, because there is never a real relation without a really existing relatum, even according to him [viz., Henry]. But the powers of the soul are fully present even if no object exists to direct their activity at. For God could make a thinking soul, without making any objects in the world. In that case, there would still be the fully present powers of the soul, and nevertheless there would be no exercise of them, since there would be no object [to direct their activity at].
(*Quaest. in Sent. 2.20, OTh 5: 432.8–12*)⁴⁷

But this begs the question against Henry. A supporter of Henry might look at this empty world populated only by your free-floating soul, and ask, what sense can even be given to the idea that you have powers in this world? In such a world, you are just a thing with certain qualities, and no activity.

Regarding his own view, Ockham agrees with the first part of Scotus's view, namely that the powers of the soul should indeed be identified with the soul:

Therefore, I say by holding the first part of the view of John [Duns Scotus] . . . that the powers of the soul, of which we speak in the case at hand, namely intellect and will . . . are really the same with each other and with the essence of the soul.
(*Quaest. in Sent. 2.20, OTh 5: 435.4–8*)⁴⁸

Of course, Ockham rejects the formal distinction wherever he can (see, for instance, Adams 1976), and he does so here too. Hence, for Ockham, the soul's powers are not even formally distinct.

Speaking of the intellect and will in the second way [i.e., by speaking about what is designated by the term "power"], then in this way the intellect is no more distinguished from the will than it is from intellect, or than God is distinguished from God, or than Socrates from Socrates, because the intellect is distinguished from the will neither in reality nor in concept.
(*Quaest. in Sent. 2.20, OTh 5: 436.5–8*)⁴⁹

At this point, we have Ockham's answer to the first question: when we speak of the soul's powers, what are we referring to? According to Ockham, we are referring to the soul's essence.

We also have Ockham's answer to the second question, namely: what sorts of entities are the soul's powers? Unlike Scotus, who thinks that they are formally distinct components in the soul, Ockham believes that they are just the soul itself (the substantial form).

For Ockham, there is the soul, which is one thing, and it is the source for multiple sorts of activities. We call the soul the "intellect" or "will" insofar as it produces an act of understanding or willing, respectively, but those are just different denominations.

And speaking in this way, there is one substance of the soul, able to have distinct acts, with respect to each of which it can have different denominations. For as it elicits (or can elicit) an act of understanding it is called the intellect, and as it elicits an act of willing, it is called the will.
(*Quaest. in Sent. 2.20, OTh 5: 436.8–12*)⁵⁰

So we have Ockham's answer to the third question too: are the soul's powers single-track or multi-track? As Ockham sees it, the soul is a multi-track power.

Moreover, Ockham outright rejects the single-track assumption that there must be as many powers as there are activities. He points out that, if you think there must be as many powers as there are activity *tokens*, then you would have to grant that there is, say, a distinct intellectual power for each particular thought, which is absurd.

I say that on account of the diversity of activities it is not necessary to posit a distinction of powers, so that there are as many powers as there are activities. For otherwise, there would be as many intellectual powers as there are acts of understanding.

(*Quaest. in Sent. 2.20, OTh 5: 429.3–6*)⁵¹

By contrast, if you think that there must be as many powers as there are activity *types*, Ockham rejects that too, asking: which type is the relevant individuator? Kinds are organized into a hierarchy, so which level is the one where we start counting different powers?

And if you say that one power extends to all activities that belong to the same genus rather than a different genus, then against this: the activities of all powers belong to the [same] genus of quality.

(*Quaest. in Sent. 2.20, OTh 5: 429.7–9*)⁵²

To summarize, like Henry and unlike Scotus, Ockham believes that the soul is the sole multi-track source of its various activities. But like Scotus and unlike Henry, Ockham believes that the soul is a power prior to any relations it might have with its activities. For more on Ockham and powers, see Adams (2001), Robert (2002), King (2008), Perler (2010), and Paasch (2012: chs. 13 and 14).

Conclusion

In the preceding pages, I looked at what four scholastic thinkers say about the powers of the soul. As I went, I attended to three questions. (1) When we speak of the soul's powers, what do we refer to or designate? (2) What sorts of entities are the soul's powers? (3) Are these single-track or multi-track powers? Each of the authors I discussed provides different answers to each of these questions, thereby revealing at least some aspects of their various ontologies of powers.

But this is only a snapshot of the topic, and there is still much to research. Obviously, the aforementioned three questions are not the only questions that deserve attention. For example, one could ask if powers are emergent (on this in Aquinas, see Stump 2012), one could ask about self-motion (on this, see Vucu 2018), one could ask who or what does the acting when powers are exercised (on this, see Cross 2008), and so on.

In addition, there are other headings (besides the soul's powers) under which scholastic authors discuss powers. For example, powers are relevant in discussions of efficient causation, mind and cognition, change, science, angels and celestial mechanics, and various topics in theology like the Eucharist, the Incarnation, and the Trinity.

Moreover, the four thinkers I survey do not exhaust the spectrum of medieval theories about powers. For an analysis of John Buridan's theory of powers, for example, see Löwe (2018) and Wood (2011). For Suarez, see Rozemond (2012) and Shields (2013). And for some reflections on various late medieval and early modern thinkers, see Pasnau (2011: ch. 23).

For further general discussion on the soul and powers in the medieval tradition, see Woods (2011), De Boer (2013), and Perler (2015). For a discussion of the topic before Aquinas, see Künzle

(1956). For primary texts in English, a text called *Later Medieval Theories of Powers of the Soul: A Reader* is currently being edited with translations by Löwe, Friedman, Embry, van den Bercken, and Paasch. Still, there is much research to be done in the area of powers, both in terms of general survey, and in terms of specific scholastic thinkers and specific issues.

Notes

- 1 “Non enim, inquantum est forma, est actus ordinatus ad ulteriorem actum, sed est ultimus terminus generationis.”
- 2 “Nam anima secundum suam essentiam est actus.”
- 3 “Nam anima secundum suam essentiam est actus. Si ergo ipsa essentia animae esset immediatum operationis principium, semper habens animam actu haberet opera vitae . . . Invenitur autem habens animam non semper esse in actu operum vitae . . . Relinquitur ergo quod essentia animae non est eius potentia.”
- 4 “Cum potentia animae non sit eius essentia, oportet quod sit accidens; et est in secunda specie qualitatis.”
- 5 See ST 1.77.6. Note that, according to Aquinas here, if the human dies and becomes a disembodied soul, they lose the powers associated with the composite during their disembodiment, since there no longer is a digestive system to do any digesting nor eyes to do any seeing. But the intellect and will are retained during disembodiment, since they are qualities of the soul itself (see ST 1.77.8).
- 6 “Proprium enim non est de essentia rei, sed ex principiis essentialibus speciei causatur, unde medium est inter essentiam et accidens sic dictum. Et hoc modo potentiae animae possunt dici mediae inter substantiam et accidens, quasi proprietates animae naturales.”
- 7 “[I]nquantum autem [subiectum formae accidentalis] est in actu, est eius productivum. Et hoc dico de proprio . . . accidente, nam respectu accidentis extranei, subiectum est susceptivum tantum; productivum vero talis accidentis est agens extrinsecum.”
- 8 “Unde manifestum est quod omnes potentiae animae, sive subiectum earum sit anima sola, sive compositum, fluunt ab essentia animae sicut a principio.”
- 9 “[P]otentia, secundum illud quod est potentia, ordinatur ad actum. Unde oportet rationem potentiae accipi ex actu ad quem ordinatur, et per consequens oportet quod ratio potentiae diversificetur, ut diversificatur ratio actus.”
- 10 “[H]oc apparet ex ipsa diversitate actionum anime, que sunt genere diverse, et non possunt reduci in unum principium immediatum . . . Et ita, cum essentia anime sit unum principium, non potest esse immediatum principium omnium suarum actionum, sed oportet quod habeat plures et diversas potentias correspondentes diversitati suarum actionum.”
- 11 “Si enim esset potentia illa alia re ab ipsa essentia, illa accidens esset in illa essentia quae eius esset receptiva, et hoc non nisi per potentiam passivam quae est ipsa essentia, vel esset abire in infinitum.”
- 12 “Cum ignis calefacit calore, ut potentia calefaciendi, ibi non est aliud essentia ipsius caloris, quae est passibilis qualitas, et aliud ipsa potentia: immo ipsa essentia caloris est ipsa potentia calefaciendi in igne: non aliquid additum ei naturaliter, aliter enim esset abire in infinitum . . . Quia si potentia non esset re essentia ipsa, esset re aliquid additum ei. Et de illa re esset quaestio eadem.”
- 13 “Unde etiam in formis substantialibus quae sunt actus tantum, non nati per se existere nec agere separatim, nullum est inconveniens quod ipsa essentia earum est ipsa potentia qua compositum agit suam propriam, et per se actionem debitam ei ratione formae substantialis. Non solum enim ratione formae accidentalis debetur composito quod agat, ut igni quod calefaciat, sed etiam ratione formae substantialis, ut quod ignem . . . generet.”
- 14 “Forma ergo substantialis rei est ipsa potentia secundum suam substantiam qua agit suam propriam operationem essentialem. Non enim forma substantialis tantum ordinatur ad actum dandi esse composito, per hoc quod est terminus generationis, sed etiam ad actum operandi, et hoc per suam essentiam, non per aliquod additum ei.”
- 15 For example, in Quod. 3.14, Bad. 1518: 67rR, Henry writes: “Et magnus error est dicere, quod potentia passiva quae est ad actum substantialem: est in genere substantiae: et quae est ad actum accidentalem, est in genere accidentis: ut qualitatis,” which is verbatim from Aquinas, QDA 12 (see Leonine 24.1: 109.183–191). Also, in Quod. 3.14, Bad. 1518: 67vV–68rV, Henry writes: “[A]rguunt contra nos sic. Sicut se habet esse ad essentiam: ita et operari ad potentiam. Ergo permutate proportionem sicut se habet esse ad operari, et essentia ad potentiam. Sed in solo deo esse suum est eius operari, ergo in solo deo essentia est ipsa eius potentia. Non ergo in anima essentia est eius potentiam,” which is also verbatim (Leonine 24.1: 107.108–113). Note that Henry summarizes rather than directly quotes arguments from Aquinas’s *Summa Theologiae*. This suggests that Henry’s primary target in Quod. 3.14 is Aquinas’s QDA 12, rather

than Aquinas's *Summa*. Later scholastic thinkers like Scotus and Ockham also discuss these arguments, and they recite these very same passages that Henry cites. So, it seems to me that they are taking these arguments directly from Henry. For instance, see Ockham, *Quaest. in Sent.*, 2.20 (OTh 5: 426.1–4). In the footnotes, the editors of Ockham's *Opera Theologica* point to Aquinas's *Summa Theologica* 1.77.5.resp. as the source of this quotation, but that seems incorrect. As is clear from Henry's text here, it comes from Aquinas's QDA 12. Ockham is presumably getting this argument from Henry's Quod. 3.14, and Henry is getting it straight out of Aquinas's QDA 12 (or perhaps Ockham is taking this argument from Scotus, who, in turn, got it from Henry).

- 16 "[O]mnis potentia, in quantum potentia, fundatur in aliquo ut respectus ad aliud."
- 17 "[P]rincipium ut principium non dicitur secundum substantiam, sed solum secundum relationem, et relationem importat ad aliud, ut ad principiatum." Henry makes this observation more than once. For example, Quod. 3.14, Bad. 1518: 68rY: "Potentia enim non definitur nisi ex relatione ad actum"; and SQO 35.8, Wilson (1994: 78.57): "[P]otentia significat 'ad aliquid' [viz. ad actum], et a ratione respectus imponitur."
- 18 "[D]e ratione potentiae in quantum potentia, est quod dicitur ad actum, ita quod nihil absolutum sit, sed solus respectus fundatus in re super aliquo absoluto."
- 19 "Sicut caliditas separata si esset calefactiva in se, non esset nisi qualitas per essentiam, et non esset potentia quaedam nisi ex naturali determinatione et respectu ad actum calidi: ita quod ired in actum quandoque approximaretur calefactibili, et cessaret ab actu absente calefactibili."
- 20 "[V]oluntas est potentia naturalis in anima, et non est nisi substantia animae: sed ex naturali determinatione et respectu ad actum volendi bonum ut bonum, sive simpliciter sive apparens, quod necesse habet velle naturaliter cum ei praesentetur in cognitione . . . et cum bonum ut obiectum . . . ei non praesentetur, velle secundum actum omnino non potest."
- 21 "Similiter intellectus agens potentia naturalis est in anima, et non est nisi substantia animae: sed ex naturali determinatione et respectu ad actum abstrahendi species intelligibiles a phantasmate, cum ei praepontur, ita quod non potest illas non abstrahere."
- 22 "Potentia vero significat ut proprietas ad aliquid respiciens, quod in suo significato includit essentiam sub ratione illius proprietatis, ut suum significatum sit quasi compositum ex duobus, scilicet ex ipso subsistenti, quod significat quasi materialiter, et illa proprietate, quam significat quasi formaliter." In fact, Henry suggests that we can think of any categorical entity that has a connection with something else like this. SQO 32.5, Macken (1991: 81.57–60): "Intentio ergo praedicamenti constituitur ex re naturae subiecta, quae est res praedicamenti, quasi materiale in ipso, et modo quo esse ei convenit . . . quae est ratio praedicamenti circa rem ipsam, quasi formale in ipso."
- 23 For more on Henry's account of relations and modes of being, see Henninger (1989: 40–58), Descorte (2002), Iribarren (2002), Macken (1981), and Teske (2006).
- 24 "Sic ergo quod tanta est diversitas et distinctio potentialitatum animae, hoc non est propter aliquam diversitatem realem quam habent ipsae ex parte animae, sed propter diversitatem de terminationum substantiae animae solummodo diversos actus respicit, et ex hoc nomina diversarum potentialitatum sortitur."
- 25 "[I]ta quod eius substantia quae una est secundum rem, secundum diversa esse, et secundum diversas determinationes, sortitur rationes diversarum potentialitatum intellectivarum et sensitivarum, cum in radice nihil sit potentia in eadem nisi eius simplex substantia, quae in se considerata, essentia sive substantia est et forma animati, considerata vero secundum diversa esse per diversas determinationes et operationes ad diversas actiones, et ad diversa obiecta, dicitur potentiae diversae quae non ponunt super essentiam eius nisi solum respectum ad diversos actus specie."
- 26 "Patet itaque quod principium importat essentialiter relationem principiationis."
- 27 "Sic ab ista relatione quae dicitur 'principiatio' significata in abstracto, diversimode denominatur 'illud quod' principiat et 'illud quod' principiat."
- 28 "Consimiliter omnino dicendum est de potentialitate, potentia et potente, quod eandem relationem important. Primum in abstracto, alia duo in concreto, sed diversimode secundum quod illa relatio nata est diversimode denominare fundamentum proximum et remotum sive subiectum."
- 29 "Quaeritur an potentia active sive passive, in quantum prior est naturaliter principiato, includat essentialiter aliquem respectum."
- 30 "Item, si aliqua relatio pertinent ad rationem potentiae activae in quantum prior est naturaliter principiato [deinde est relatio?]."
- 31 "[Q]uod approprietur sic quod habeat in se totam perfectionem requisitam ad causationem huius, hoc oportet."
- 32 "Secundo modo prius dicitur, a quo aliquid dependet, et posterius, quod dependet."
- 33 "Huius prioris hanc intelligo rationem, quam etiam Aristoteles 5^o Metaphysicae testimonio Platonis ostendit: Prius secundum naturam et essentiam est quod contingit esse sine posteriori, non e converso."

- 34 “Quod ita intelligo, quod, licet prius necessario causet posterius et ideo sine ipso esse non possit, hoc tamen non est quia ad esse suum egeat posteriori, sed e converso.”
- 35 See Henninger (1989) and Hansen’s contribution to this volume for more on Scotus’s theory of relations and scholastic theories of relations in general.
- 36 “[N]am illa [relatio] simul natura est cum principiato . . . et posterior est natura eo quod est principiatum, hoc est, illo in quo fundatur relatio principiatum.”
- 37 “Oporteret autem relationem intrinsecam potentiae activae esse priorem natura illo quod est principiatum. Ergo omnino nulla relatio invenitur talis.”
- 38 “Unde, quando quaerimus in quo sunt aliqui similes, non quaerimus in quo sunt similes per se primo modo, quia sic similitudine sunt similes, sed quaerimus in quo sunt similes secundo modo per se, utrum sint similes albedine vel alia forma; unde quaerimus de fundamento similitudinis. Similiter quando quaeritur quid sit potentia animae, non quaeritur de respectu quem potentia importat, sed quaeritur de fundamento.”
- 39 “Mihi a docto doctore. Domandatur causam et rationem quare Opium facit dormire. A quo respondeo; Quia est in eo Virtus dormitiva, Cujus est natura Sensus assoupire” (Molière 1879: 567).
- 40 “Ergo praecise alterum [viz., absolutum] est essentialiter potentia activa, non relatio tantum . . . Ergo illa [viz., forma absoluta] praecise est potentia activa.”
- 41 “Sicut autem alia concreta communiter accipimus pro subiectis in quantum habent tales formas, ita frequenter quando dicimus ‘potentiam’, non intelligimus de respectu, sed de illo in quo fundatur respectus.”
- 42 “Dico igitur quod intellectus et voluntas non sunt res realiter distinctae, sed potest sustineri, quod sunt omnino idem re et ratione; vel quod essentia animae omnino indistincta re et ratione, est principium plurium operationum.”
- 43 “[N]on sunt potentiae idem formaliter vel quiditative, nec inter se nec etiam cum essentiae animae, nec tamen sunt res aliae, sed idem identitate.”
- 44 For more on the formal distinction, see Grajewski (1944), Gelber (1974), Adams (1976), Cross (2002), and Paasch (2012: 68–74).
- 45 “[D]ico aliter quod potentiae non sunt res alia [quam anima], sed sunt unitive contentae in essentia animae.”
- 46 “Si dicas quod intelligere est actus secundus . . . igitur aliter habet esse quam actus primus . . . Dico quod est actus secundus, quia praesupponit aliquem actum priorem in illo a quo est, puta potentiam et habitum vel saltem alterum; sed actus primus non sic . . . Et nullo modo dicitur actus secundus quia plus habet esse in fieri vel fluxu quam potentia vel habitus, qui sunt actus primi quia habent totum esse suum simul.”
- 47 “Nec est respectus realis, quia nunquam est respectus realis sine termino realiter existente, secundum eum etiam [viz., secundum Henricum]. Sed potentiae animae possunt esse perfectae et nullum obiectum [esse], quia Deus potest facere animam intellectivam non faciendo aliquod obiectum in mundo. Et tunc erunt potentiae animae perfectae, et tamen nullus terminus in actu, quia nullum obiectum.”
- 48 “Ideo dico, tenendo primam partem opinionis Ioannis . . . quod potentiae animae, de quibus loquimur in proposito, scilicet intellectus et voluntas . . . sunt idem realiter inter se et cum essentiae animae.”
- 49 “Sed loquendo de intellectu et voluntate secundo modo [in modo accipitur pro illo quod denominator ab illo nomine potentia], sic intellectus non plus distinguitur a voluntate quam ab intellectu vel quam Deus a Deo vel Sortes a Sorte, quia nec distinguitur a voluntate nec re nec ratione.”
- 50 “Sed sic est una substantia animae potens habere distinctos actus, respectu quorum potest habere diversas denominationes. Quia ut elicit vel elicere potest actum intelligendi dicitur intellectus; ut actum volendi voluntas.”
- 51 “[D]ico quod propter diversitatem actuum non oportet ponere distinctionem in potentiis, et tot potentias quot actus. Aliter enim esset tot potentiae intellectivae quot actus intelligendi.”
- 52 “Et si dicas quod una potentia se extendit ad omnes actus eiusdem generis et non diversi generis, contra: actus omnium potentiarum sunt in genere qualitatatis.”

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10

IDENTITY AND SAMENESS

Andrew W. Arlig

In this chapter, we will explore some of the main metaphysical issues that pertain to identity and sameness as they were addressed in the medieval period. Of course, the notions of identity and sameness can also be approached from a logical or semantic angle. Medieval logicians had some interesting things to say about the logical and semantic properties of such terms as “same” (*idem*) and “different,” including—to name just one case—some very interesting discussions of inferences involving the substitutivity of identicals into opaque contexts.¹ This article, however, will largely ignore such logical issues.

Types of Sameness

While the word *identitas* does appear in medieval philosophical and theological works, it is much more illuminating to say that medieval philosophers developed complicated theories of kinds of sameness and their properties. In medieval discussions, identity (in our modern sense of the term)—if it is recognized by medieval thinkers—is situated within a broader discussion of kinds of sameness and difference. This way of thinking about identity and more broadly sameness is inherited from Aristotle.

Basic Aristotelian Kinds of Sameness and Difference

The primary sources for Aristotle’s views on sameness and difference are his *Topics* (along with the *Sophistical Refutations*), his *Physics*, and his *Metaphysics*. In his *Topics*, Aristotle tells us that there are three basic senses of “same”: (1) same in number, (2) same in species, and (3) same in genus (1.7, 103a7–9). Boethius repeats this threefold scheme in his *On the Trinity* 1 and hence passes this basic framework on to the earlier generations of Latin-speaking philosophers, who did not have direct access to Aristotle’s *Topics*, *Physics*, or *Metaphysics*.

To the modern ear, “numerical sameness” might suggest a relation that behaves like identity—that is, a relation that, for example, is reflexive, symmetric, transitive, and obeys the principle of the Indiscernibility of Identicals. There are some medieval discussions which suggest that philosophers in this period were sensitive to these features of identity. For example, in his great summary on logic, Buridan (2001: 313) states that every affirmative syllogism holds in virtue of the principle that “whatever things are said to be numerically identical with one and the same thing, are also said to be identical between themselves,” and (ibid.: 315) negative syllogisms are said to be valid in virtue of an analogous principle (*Summulae de Dialectica* 5.1.8). This indeed looks like transitivity.

But there are other ways in which the comparison between medieval understandings of numerical sameness and contemporary, Leibnizian notions of identity is misleading. For example, given that sameness is a relation, medieval thinkers had trouble with the notion that sameness could be reflexive:

For this reason, it is clear that if a relation always requires two extremes [i.e., disparate things] and in relations of this sort [i.e., identity relations] there are not two extremes in reality but only in the understanding, then the relation of identity will not be a real relation; it will only be a relation of reason, on account of the fact that something is said to be the same simpliciter.
(*Aquinas 1950, Met. V.11, n. 7*)

Given the trouble that medievals had with the locution “*x* is the same as itself,” they tended to substitute that phrase for one that did not imply a relation, namely, “*x* is numerically one.” (For more on the link between sameness and unity, see the section “Comparing Identitas to Identity”.)

It is also notable that for many medievals, numerical sameness did not necessarily conform to the principle of the Indiscernibility of Identicals. The seed for this divergence from mainstream modern thinking about identity is already in Aristotle. In *Topics* 7.1, Aristotle presents some tests to determine whether two items are numerically the same or different. It is here that many commentators see a commitment to the Indiscernibility of Identicals:

Speaking generally, examine whether there is any difference among the things that are in any way predicated of either one and of those of which these are predicated. For whatever is predicated of one must be predicated of the other, and those of which one is predicate, the other must be a predicate.

(152b25–29)

In an influential paper, Nicholas White (1971) has argued that Aristotle backed away from a thoroughgoing commitment to the Indiscernibility of Identicals in later works, such as in a famous passage in *Physics* 3.3, where Aristotle claims that “it is not the case that all the same things belong to things that are the same in any way whatsoever, but only to those for whom the being is the same” (202b14–16). Mario Mignucci has disputed this interpretation, but what is more germane for our present purposes is that he admits that several later Greek commentators, including most notably Simplicius, did interpret Aristotle as in effect moving away from a full-blooded commitment to the Indiscernibility of Identicals and toward the view that the principle is valid only in cases where the things that are the same not only denote the same object, but also share the same sense (1985: 86). Likewise, many of the subtler medieval thinkers thought that *X* and *Y* could be numerically the same and yet not share all and only the same properties.

Medieval Elaborations on the Basic Framework

As Alan Wolter has observed, in the Middle Ages there was general agreement that (1) there are features of the world that are really distinct from one another, (2) there are other features that are merely ways in which the human mind thinks about the world (distinctions of reason), and then (3) there are features that are not really distinct from one another and yet are in some robust sense founded in the way that the world is and not merely artifacts of humans minds.² Naturally, there was much disagreement about how precisely to characterize the third sort of phenomenon, which is perhaps borne out by the choice of terminology to describe distinctions of the third sort. To mention what are perhaps the two most famous cases, Henry of Ghent asserted that some items were not really, but only “intentionally distinct,” and John Duns Scotus availed himself of the

“formal distinction” in a number of philosophical and theological contexts. Of course, there were also some notable exceptions. Godfrey of Fontaines attacked Henry of Ghent’s use of the intentional distinction (see Wippel 1981: 79–89), and William of Ockham insisted that it was impossible for two items to be formally distinct unless there was also a real distinction (*Ordinatio* XXX, in Spade 1994: 156–158; cf. Adams 1987: 46–52, 934–936).

The obvious cases (at least for a medieval Christian) of phenomena described by (3) involved features associated with the Trinity and the Incarnation. For instance, there is one and only one God. But God is three persons, and each of those persons is God. It would seem that no two divine persons are numerically the same as each other. But that quickly threatens to split the one, absolutely simple divinity into parts, if not three gods. Hence, there is enormous pressure to assert that the persons are numerically the same as the divine essence, and yet distinct in a way that is less than real but more than merely in reason.

There are also mundane cases that seemed to fall under the third category. In the thirteenth and fourteenth centuries, for example, there was an intense interest in the question whether the essence and *esse* (being) of a concrete thing were really distinct (attributed to Aquinas and defended by Giles of Rome), distinct merely in reason (e.g. Godfrey of Fontaines and John Buridan), or distinct in some third manner (Henry of Ghent).³ Medieval philosophers also strained to describe the precise way in which a human soul, which for doctrinal reasons must be indivisible into parts, can “consist of” or have a plurality of real powers. And the so-called “moderate” realists searched for ways to describe the relationship between a particular substance and its nature, which is something that is common to all substances of a kind even though no thing can fail to be a particular.

We also find attempts to carve out a middle way between a real distinction and a distinction in reason early in the medieval tradition. Perhaps the most notable of these attempts is by the twelfth-century philosopher Peter Abelard (see Arlig 2012b, esp. 130–133). Abelard asserts that numerical sameness and difference are derivative of a more fundamental kind of sameness and difference, sameness and difference in *essentia*. X and Y are the same in *essentia* if and only if X has all and only the same parts as Y, that is, X and Y must mereologically coincide. X and Y are different in *essentia* if they fail to mereologically coincide. If X and Y are the same in *essentia*, then X and Y are numerically the same. Notice that sameness in *essentia* appears to be symmetric and transitive. If X mereologically coincides with Y, then Y mereologically coincides with X. If X mereologically coincides with Y, and Y mereologically coincides with Z, then X mereologically coincides with Z. Parasitically, numerical sameness will be symmetric and transitive.

Yet, remarkably, things may fail to be numerically the same and yet also fail to be numerically distinct. This is because things can fail to mereologically coincide in two ways: X and Y can overlap but fail to completely overlap; or X and Y can fail to overlap. Abelard makes it clear that X and Y are numerically distinct only if X and Y fail to have any parts in common. This leaves a large number of cases where X and Y are *neither* numerically the same *nor* numerically distinct. By way of contrast, numerical identity, as it is normally conceived by modern thinkers, is all or nothing: X and Y are not numerically identical if and only if X and Y are numerically distinct.

But that is not all, two items can be numerically the same and yet fail to share all and only the same properties, or to put the point in Abelard’s terminology, X and Y can be essentially and numerically the same and yet be different “in property” or “in definition.” Difference in property or definition will turn out to be the key to the Trinitarian conundrum. But Abelard also offers us a more mundane example of things that are numerically the same yet different in property: the wax and the waxen image. Students of contemporary metaphysics will recognize that Abelard is pointing to a case of material constitution, and so it appears that in his pursuit of a solution to the Trinitarian problem, Abelard has stumbled upon an answer to Allan Gibbard’s famous puzzle concerning the statue and the clay out of which it is composed (Brower 2004; Arlig 2012b). But

of more relevance in the present context, it should be observed that for Abelard, the Indiscernibility of Identicals is not constitutive of numerical sameness. Some things that are numerically the same are also the same in property. But while the wax and the waxen image are numerically the same, Abelard (1969: 247–248) insists that “their properties remain so thoroughly unmixed that the property of the one in no way participates in the other, even though the substance of both is absolutely the same in number” (*Theologia Christiana* 3.140).

A perhaps more famous, if not notorious, form of sameness and difference is Duns Scotus’s formal distinction (and its correlate, formal, or “adequate” identity), which he used to not only unravel theological knots, but also in several contexts involving the metaphysics of created things.⁴ X and Y are adequately the same when X and Y are really the same and they overlap completely with respect to their definitions. Even though formal or adequate sameness comes closest to capturing what we think of as identity, for Scotus it is a qualified form of sameness. For Scotus, the core type of sameness is real sameness. X and Y are really the same when they are inseparable. X and Y are separable, and hence really distinct, if either X can survive without Y or Y can survive without X (Cross 1998: 8–9).

In fact, once the real distinction is characterized in terms of ontological separability, it is hardly surprising that philosophers and theologians would see the need for a distinction that captures the fact that two are inseparable, and yet different in a way that does not depend upon how a human mind conceives of them. For example, if one rejects Platonism, it is not obvious that a thing’s *esse* and its essence are separable—although one defender of the real distinction between *esse* and essence asserts that they are!⁵—and it is hard to claim that the powers of Socrates’s soul are really distinct if one wants to reject the view (also associated by medievals with Plato) that a soul is actually an aggregate of (potentially) independently existing powers. Finally, there is the Trinity. Previously, it was observed that Ockham rejects the formal distinction as a third type of distinction. There is one exception: Ockham allows the use of the formal distinction in the case of the Trinity, although he strains to bleed the distinction of any ontological commitments (Adams 1987: 1000–1007; Thom 2012: 167–169).

Comparing Identitas to Identity

It should now be apparent that medieval thinking about sameness and difference is in several respects markedly different from mainstream contemporary thinking about identity. In recent years, some observers have described medieval theories of numerical sameness as “numerical sameness without identity” (Rea 1999; Brower 2004). Brower and Rea prefer this label to the one that often appears in the literature on Aristotle’s theory of sameness, viz. “accidental sameness.” But while this might be a useful way to explain medieval thinking about sameness and difference to a contemporary audience, it should not go unnoticed that in so far as this characterization suggests that the principle or core notion of sameness for a medieval is Leibnizian identity, the characterization is misleading.

The difference has much to do with the particular starting point of Aristotelian theories of sameness and difference. Following Aristotle’s lead, medieval thinkers tend to frame the various forms of sameness and difference in terms of different types of unity; indeed, many medieval thinkers describe sameness as an “attribute” (*passio*) or division of unity. So, for example, in his commentary on *Metaphysics* 5, Aquinas makes the following remark:

The parts of “one” are (1) “same” (*idem*)—i.e. “one in substance”—(2) “similar” (*simile*)—i.e. “one in quality”—and (3) “equal” (*aequale*)—i.e. “one in quantity.” And in contrast, the parts of “many” (*multitudo*) are diverse (*diversum*), dissimilar, and unequal.

(Aquinas 1950, *Met. V.11, n. 2*)

It is also sometimes observed that unity is to be characterized as a privative notion: it connotes indivisibility.⁶ When situated in this context, it should now be clear why medieval treatments of the types of sameness and difference tend to begin by itemizing the sorts of divisions which can be made in a thing. This also explains why, for instance, medieval critiques of Scotus's use of the formal distinction often centered around the fact that he seemed to be positing true pluralities in things that are supposed to be absolutely simple. For example, Scotus's initial characterization of the formal distinction seemed to commit him to positing a plurality of "realities" or "formalities" in God. While Scotus strenuously insisted that a formality is not a separable thing—and hence a true *part* of the divine essence—he seemed to be troubled by criticisms of his early version of his theory. Some have even held that Scotus altered his characterization of the formal distinction in order to dispel the illusion that he was compromising the doctrine of God's absolute simplicity (Adams 1987: 26–29; but see Dumont 2005).

Identity, Constitution, and Persistence

In the midst of a discussion of monism, Aristotle adds what appears to be a digression about wholes and parts (*Phys.* 1.2, 185b11–16): are the part and the whole one or many? Or, given that the answer to that question surely is "one considered in one manner and many when considered in another," in what sense is the part and the whole one and in what sense is the part and the whole many? In particular, if a part is one with the whole in the sense of being undivided, is it also the case that this is one with that part?

Late ancient and medieval commentators seem to have been struck by this passage and they often devoted a considerable amount of energy to the questions that Aristotle raised.⁷ As Averroes reads Aristotle, the primary question takes the form of a dilemma:

Are the part and the whole the same, and if they are the same, in what sense can they be said to be the same? For the whole appears to be other than the part. On the other hand, if the parts differ from the whole, in what sense are they said to be other? For the whole is nothing other than the collection of the parts [*congregatio partium*].

(1574: 13vL, In *Phys.* 1.2, *Comm.* 17)

Either answer seems to present us with difficulties (*ibid.*: 13vL–14rA):

For if any single one of the parts is the same *with* the whole because it belongs to the whole (that is, not separated from the whole), then any single one of the parts will be the same as the whole.⁸ And thus every one of parts will be the same with every other one. Thus, the head, the hand, and the neck will be the same . . . The opposing argument to this is not made explicit on account of it being quite notorious. It is this: every part is other than the whole. The whole is nothing other than the collection of the parts. Therefore, the whole is other than itself.

Averroes rightly observes that the opposing argument is a howler. Even if each of the parts taken singularly were other than the whole, all of them taken together (*omnes in simul*) cannot be said to be other than the whole. But, arguably, Averroes is too quick to dismiss the question whether the parts taken together and all at once are the same or other than the whole. As we will see, the claim that the whole is nothing other than the collection of the parts is controversial (see the section "Is the Whole the Same as Its Parts Taken Together?").

Averroes's treatment of the first horn of the dilemma is also much too facile, for he does not identify the precise way in which a part is the same as its whole, and in what way the part is different. True: the whole cannot be unrestrictedly the same as one of its parts, since then it ought

to be unrestrictedly the same as any other one of its parts. But then it would follow that one part (e.g. my left hand) is unrestrictedly the same as another part (say, my right hand). Averroes seems to think that by merely denying that the part is the same as the whole, the transitivity puzzle dissolves. However, as later commentators note, there also are difficulties with assuming that the part is unrestrictedly other than its whole. Surely, for example, it is one thing to say that Plato is other than Socrates, and it is another thing altogether to say that my left hand is other than my body. There is a sense in which my hand is not other than my body, since my body includes my hand. What precisely is that sense?

One common solution appears to be this (see, e.g., Aquinas 1884, *In Phys.* 1.3, n. 3): the whole is not unrestrictedly the same (*idem simpliciter*), but rather only qualifiedly the same (*secundum quid idem*) as the part. Hence, my left hand is only qualifiedly the same as my body. It is the same *secundum partem* as the body, that is, it is the same as the body in so far as it is part of the body.

This observation is surely right, but one could be forgiven for thinking that it does not go very far toward offering us a solution to the puzzle. I have suggested that we can find other, more satisfying analyses of the sense in which a part is the same as its whole elsewhere in the medieval tradition (Arlig 2012a). For instance, consider again Abelard's elaborate theory of sameness and difference.⁹ As the reader will recall from above, for Abelard, two items are essentially the same if and only if they mereologically coincide. All it takes to be essentially different is for the two things to fail to share all the same parts. Numerical difference, however, requires that the items fail to share any parts. Clearly, then, there can be cases where things are essentially different and yet neither numerically the same nor numerically different. A house and its wall, or my left hand and my body are such cases. Abelard's view can be compared to a solution to this puzzle offered by David Lewis (1993; cf. Normore 2006: 749), who, in turn, is taking up the suggestion offered by David Armstrong that absolute identity and absolute difference are the endpoints of a continuum. Between these endpoints, there are degrees of partial identity and partial difference. A part and its whole are closer to being absolutely the same to the degree that the part shares more of its parts with the whole—e.g. the top half of my body and my left hand are both partially the same as my body, but the top half is closer to being absolutely the same as my body than my left hand is.

The Problem of Too Many Animals

To see why all this might matter, we should think about not hands, but larger parts of animals and humans. Consider a medieval puzzle that Peter Geach (1980) later adapted and made famous with his example of Tibbles the cat. In the Middle Ages, the puzzle is usually centered around a man named Socrates. Since Geach himself credited William of Sherwood with the puzzle, let us quote the medieval author's presentation of it in his *Synkategoremata*:

Assign the whole Socrates the name "A," and the whole Socrates except (*praeter*) a foot "B."
Accordingly, A is an animal and B is an animal. Thus, if B is a part of A, it follows that an animal is part of an animal.

(1941: 60)¹⁰

A common response was to claim that "B is an animal" is false, since B is a part. But, as William notes, there seems to be a *prima facie* case in favor of the proposition that B is an animal, even when it is a part of A (*idem*):

Let the foot be cut off and then one would say that B is an animal. But there is not some animal now which previously was not. Thus, B previously was an animal. Therefore, "B is an animal" is true.

With a nod to Geach's formulation of the puzzle, we can see how in short order we could draw the inference that Socrates consists of an indefinite number of animals (Geach 1980: 215).

In response to all this, many medieval thinkers stuck to the assertion that a part of an animal cannot be an animal. For example, Albert of Saxony (1999: 131–132) insists that in order to say that something is an animal, “it is required that this thing is one separately existing being, which is not existing as a part of something else.” When the foot has not been amputated, the part is not an animal, although it could become an animal, since “then it would be one, separately existing substance, and it would not be existing as a part of another substance or of anything else that happens to be *per se* one” (*Quaestiones* 1.8).

Buridan (1984) also asserts that a part of an animal is not *an* animal—that is, a particular substance—but he adds an interesting elaboration (*Quaestiones in De Anima*, final lectures, 2.7). Every part of animal is animal. However, to be *an* animal, the thing must be a *per se* unity. Thus, the only thing that is *an* animal is the whole, and even though Tibs is cat, the only thing that is *a* cat is Tibbles. Buridan makes this distinction because he thinks that every part of a non-human soul has all the powers of the whole soul. Hence, Tibs has all the powers of a cat. Each part of a cat is a substance, and a substance must belong to a natural kind. The obvious natural kind under which a cat part falls is, hence, *cat*. The case of a human is even more straightforward since (for theological reasons) Buridan asserts that the human soul—though itself mereologically atomic—wholly imbues every part of the body. Thus, every non-detached part of a human body has all the powers and capacities of the whole soul and hence, each part falls under the natural kind *human*, even though no non-detached part of a human is *a* human.

William of Sherwood's own solution to the sophism is that B is an animal and B is a part of an animal, but in different manners. B is an animal, indeed the same animal as A, when considered with respect to the soul, since the whole soul imbues and perfects A and the same soul, as a whole, imbues B. (In effect, then, William seems to be suggesting that we count *animals* by counting souls.) However, when B is considered with respect to the body, B is not an animal, but rather a part of an animal. To infer that B is both a part of an animal and considered under the same respect, an animal is to commit a fallacy of accident (1941: 60–61; compare to Geach's solution, 1980: 261).

Is the Whole the Same as Its Parts Taken Together?

A much trickier problem is whether the whole is the same as all of its parts taken together. On several occasions, Abelard asserts that a whole is the same as the sum of its integral parts (Arlig 2013). As we saw earlier, Averroes also asserts—seemingly without qualification—that a whole is nothing other than the collection of the parts. And in the fourteenth century, Ockham and other nominalistically inclined thinkers held the view that a whole is its parts (Pasnau 2011: 681–688). For both Abelard and the fourteenth-century nominalists, the view that the whole is the same as its parts taken together would push these thinkers toward a stringent criterion for diachronic identity (see the section “Identity over Time and through Change”). In addition to being saddled with an uncompromising position about diachronic identity, there seem to be other problems for the view that every whole is nothing other than its parts taken together.

First, it would seem that the issue ought to have been settled by an appeal to authority. In his *Topics*, Aristotle claimed, without any apparent restrictions, that the “parts and the whole are not the same” (6.13, 150a15). Aristotle also distinguished between types of collections. Some things are merely totalities and others are wholes (*Metaphysics* 5.25). Wholes require some sort of structure. Likewise, the upshot of the final chapter of *Metaphysics* book 7 (and also book 8) is that the whole is something more than its elements; it is the elements organized by a formal principle. This, again, would seem to imply that the whole is something “over and above” the sum of its parts.

(For more on these and related Aristotelian passages, see Koslicki 2006.) Even some philosophers who did not know these parts of Aristotle's corpus appreciated the idea that some wholes might be identical to the sum of their parts, whereas others are not. For example, the anonymous author of the twelfth-century *Compendium Logicae Porretanum* notes that while all discrete wholes—both aggregates and even artifacts (i.e. wholes whose parts are “contiguous”)—*are* merely the sum of their parts, all continuous wholes are not (Anonymous 1983: 38–39).

In addition to the weight of authoritative texts, there are good philosophical reasons to resist the idea that the whole is its parts. The most significant of these philosophical reasons is that, as any reader of Boethius's *On Division* knows, the parts are “prior in nature” to their wholes. This means that the parts could exist even when the whole does not. The parts must exist, but for any whole more complicated than a mere plurality, there must be a structure in place as well. For a pile of stones to exist, the stones must exist and they must be *spatially proximate* to one another. For a *house* to exist, the house parts must exist and they must be *arranged* as a house. Even in the case of a substance, such as a horse or a human, not only must the soul and the matter exist, but they must be fitted together so that the soul *imbues* the matter. The last scenario, where soul and matter exist but lack the appropriate structuring relations, might at first be hard to imagine. Surely, in natural cases, if a substantial form is spatiotemporally proximate with matter of the right sort, the form will imbue the matter. But later medieval philosophers reminded their readers that form and matter could be proximate and yet impeded by divine power. The debate, then, seemed to center around whether the possibility of divine intervention implied that there must be something in addition to the substantial form and the matter—namely, another kind of form—that makes it such that the substantial form and the matter combine to become a whole. Ockham asserted that the possibility of divine intervention did not force us to posit extra entities. Scotus thought that it did: there had to be a real relation of inherence.

In fact, Scotus's position is even subtler than that: an “accidental unity,” such as white Socrates, is the same as the sum of Socrates, his whiteness, and the real relation of inherence. But when it comes to substantial unities, as Cross (1998) puts it, Scotus's view is “strongly anti-reductionistic.” The substantial unity is not the same as the sum of the substantial form, the prime matter, and the relation of inherence. It is an extra thing over and above the sum of the parts.

On the face of it, Scotus seems to have the weaker position, for we are immediately tempted to ask *in virtue of what* is a substance different from the sum of its substantial parts. Sometimes, Scotus's language suggests that there is an additional form that the whole substance has. But if the substance has an extra formal component, we seem to be in danger of embarking on an infinite regress. For one could ask whether the whole just is the substantial form, the matter, the relation of inherence, and the extra unifying form taken together. If the answer is yes, then Scotus does not differ from reductivists like Ockham about the claim that a whole is its parts; there is merely a disagreement about the number of parts. If the answer however is no, then there seems to be no principled reason why we cannot ask after the cause of this new unity. But in fact it seems that, following a suggestion from Aristotle's *Metaphysics* 7.19, Scotus thinks that the whole substance is not other in virtue of some additional part. This saves Scotus from the regress objection, but it leaves him with the same sort of worry that plagues the reductivists.

The reductivists must acknowledge that there can be cases where the parts exist and yet the whole does not. That is, in the end, reductivists must acknowledge that for many (if not most) cases of composition, there is an extra fact that must obtain in addition to the fact that the parts exist. Ockham, for one, acknowledges this (1984: 208, *Summula Philosophiae Naturalis* 1.19):

So it holds that the whole is nothing other than all the parts; however, not always, but only at that time when they are collocated or ordered or united in the manner required. For different unions of parts are required for different wholes: Sometimes it is required that the parts are

located altogether; sometimes that there is no distances between them in the sense that there is nothing in between; and sometimes there can be something in between, but a correct ordering is required (as when many humans make up one populace).

Abelard, likewise, concedes that extra conditions or facts must often obtain (see, e.g., 1970: 550–551). Nonetheless, both Abelard and Ockham will insist that no extra *things* (*res*) are required to explain composition. The success of the reductivist position, then, rests on whether its proponents can make reference to conditions, orderings, and other structures, without taking on any extra ontological commitments.

Identity over Time and through Change

What conditions must obtain for this animal at one time to be numerically the same as that animal at another time? In the twelfth century, there was a robust debate about this (see Arlig 2013). Again, Abelard seems to be at the center of it all, since he repeatedly is on record asserting that no thing, or *res*, has more parts at one time than at another. The so-called Nominales, who are usually considered to be Abelard's followers, reportedly asserted that “nothing grows” (*nihil crescit*). Perhaps unsurprisingly, these relatively extreme claims were attacked by other twelfth-century philosophers. And even in the case of Abelard and the Nominales, it is unclear just how widely their commitment to mereological essentialism extends. It is clear that Abelard believes that all discrete integral wholes, including man-made objects, cannot survive the addition or removal of any part. But when considering the case of human beings, Abelard rather meekly notes that perhaps one does not commit homicide when Socrates's nails are clipped (1970: 552), and the Nominales appear to have drawn a distinction between on the one hand *res* and *substances*, which are mereologically static, and on the other hand *persons*, which can grow and diminish (Martin 1998).

In contrast to the twelfth century, the question of persistence seems to have had a relatively straightforward answer for most of the thirteenth century: this animal is numerically the same as that animal provided that the substantial form of the former is numerically the same as the form of the latter.¹¹ Of course, there are some subtle differences in how this “standard” doctrine is formulated. For example, consider the nuanced version of the account in Walter Burley's short treatise on mereology:

Formal parts (*partes secundum formam*) are those which always remain the same, so long as the whole remains the same and complete. Material parts are those that come and go. Examples of the former: a hand, a head, and others of this sort always remain the same, so long as the whole remains the same. Examples of the latter: flesh and marrow, these come and go while the whole remains the same. And just as “part” is said in two ways—namely, materially or formally—so too “whole” is said in two ways—i.e. formally or materially. Hence, a man in youth and in old age is the same whole formally and has the same soul at all times, but he is not the same materially, since he possesses one matter in one stage [of his life] and a different one in a different [stage].

(1966: 301)

Burley's concession that the matter is in a sense independent from the form and hence can be said to remain the same or become different is noteworthy, since it points toward developments among his contemporary nominalist opponents. Nevertheless, his insistence that the substantial form is the principle of persistence still situates him among the proponents of the standard view.

In the fourteenth century, persistence, once again, becomes a much more complicated affair. Ockham, Buridan, Albert of Saxony, and Nicole Oresme (among others) broke from the standard

Aristotelian solution to identity over time. These thinkers held not only the thesis that a whole is its parts, but also “the no-transfer principle,” i.e. the principle that no form can move from one hunk of matter to another (Pasnau 2011: ch. 29). When these two principles are combined, it is clear that identity over time becomes problematic again. After the Condemnation of 1277, however, it was forbidden to assert that a human cannot grow by means of nourishment. Clearly, then, there had to be a sense in which a human is numerically the same over time despite mereological change. The solution that these philosophers more or less all endorsed was that there were three modes or kinds of diachronic numerical sameness: (1) numerical sameness in a “total” sense, (2) numerical sameness in a “partial” sense, and (3) numerical sameness in a “less proper” sense or in virtue of succession.¹² For X and Y to be numerically the same over time in the strictest sense, X must have all and only the same parts as Y (if X and Y have parts). Only mereologically atomic things and things that never lose or gain matter (such as celestial things) are in fact ever numerically the same in this sense. For X and Y to be the same in the second sense, X and Y must share at least one part, where this part is strictly numerically the same from time to time. This is the sense in which 10-year-old Socrates and 30-year-old Socrates are numerically the same; they share a mereologically atomic part, namely, his intellective soul. Non-human animals and plants, as well as lower order things, only have diachronic numerical sameness in the third sense, since per the no-transfer principle their souls change as their material parts change. A horse or a houseplant persists through time and changes only in virtue of there being a succession of causally related horses or plants.

There is a lot more than one could say about this remarkable treatment of survival through change. For the present, however, a few brief remarks must suffice. Most importantly, note that we should not be too quick to attribute to all of these nominalist thinkers the thesis that there is a strict and proper sense of “identity” and a loose and vulgar sense in which something is the “same as” another. For example, Buridan appears to be contrasting three different philosophical senses of being the same—each with different, but precisely defined truth conditions—with the way that we commonly speak. For instance, here is what he says about the persistence of human beings:

The third thing to say is that, from the beginning of his life up to the end, a man remains partially the same, or I should say, [the same] with respect to his noblest and most principal part (that is, with respect to the intellective soul, which always remains wholly the same). And from this we can conclude that speaking in an unqualified way and without anything added that a man remains the same from the beginning of his life to the end. And this is because we customarily denominate, unqualifiedly and without adding anything, a thing by means of its most principal part, and this is especially so if the most principal part is something that is clearly superior in the way that the intellective soul is superior to the body.

(2010, De Gen. 1.13)

In many conversational contexts, we are entitled to make unqualified attributions of sameness. It is only when we are doing natural philosophy that we must be sure that we qualify our statements, given the kind of entity under scrutiny. Moreover, Buridan seems to be explaining why we are usually not misled when someone makes an unqualified statement about sameness in colloquial contexts.

Nevertheless, some later medieval philosophers, including Nicole Oresme and John Major, did draw a distinction that resembles Bishop Butler’s famous division between strict and popular senses of identity (see Pasnau 2011: 700, 703). And this is certainly a predictable trajectory that these nominalist inquiries into numerical sameness over time might take. Hence, the theory of diachronic identity offered by these later nominalistically inclined philosophers is perhaps one of the clearest cases where we see affinities between the philosophy of the later Middle Ages and the philosophy of the early modern period.

Notes

- 1 The *locus classicus* for such discussions is Aristotle's *Sophistical Refutations* 24. For an analysis, see Mignucci (1985: 75f). For medieval treatments of the issues raised in this section of the *Sophistical Refutations*, see the helpful discussion by S. Read and G. Priest in Priest (2005: 68–81).
- 2 See his “The Formal Distinction” and “Scotus’s Realism,” both reprinted in Wolter (1990). This outline of the medieval consensus appears on pp. 27–30, 43–45.
- 3 For an overview of one such thirteenth-century debate, see Wippel (1981: ch. 2). On Aquinas’s commitment to a real distinction between essence and *esse*, see Wippel (2000: 145f). Cf. Giles of Rome *Theoremata*, Thms. 5 (1930: 24f) and 12 (p. 68f). For Buridan, see *Quaestiones in Metaphysicam* 4.8 (1588) and Stuart (1993).
- 4 For example, the formal distinction is employed in Scotus’s analysis of what makes an individual thing individual (Spade 1994: 107).
- 5 Giles of Rome *Theoremata*, Thm. 12 (1930: 67–68).
- 6 Buridan, *Questiones in Isag.* q. 11 (1986: 170.1780–98).
- 7 For a particularly fascinating late ancient discussion, see Philoponus’s *In Phys.* 1.2 (2006: 65–68).
- 8 “Si unaquaque partium est idem cum toto, quia est totius, id est non separata a toto, tunc unaquaque partium idem toti.” It is not quite clear what turns on the difference between being the same with X and being the same as X.
- 9 It should be observed that Abelard was not directly aware of the passage from the *Physics*.
- 10 Cf. Kretzmann’s translation (Sherwood 1968: 60–61). See also Albert of Saxony, *Quaestiones* 1.7 (1999: 97). In Albert’s *Quaestiones*, the puzzle is one of several raised in opposition to the claim that the whole is its parts (*utrum totum sit suae partes*). On the issue of whether a whole is the sum of its parts, see the section “Is the Whole the Same as Its Parts Taken Together?”. The puzzle concerning an indefinite number of men is also raised in Albert’s logical treatises, as well as logical and physical treatises by others. For the discussions in these logical works, see Fitzgerald (2009).
- 11 See Pasnau (2011: 689–692). Interestingly, Scotus seems to take a different view. When examining the doctrine of bodily resurrection, Scotus defends the view that the identity of a particular substance S requires the identity of S’s matter. This is in stark contrast to, for example, the view of Aquinas, which holds that form is primarily what determines identity. The doctrine of resurrection adds some extra wrinkles to the problem of personal identity over time, since this supernatural event raises the possibility that a thing can have a gappy existence. On this issue, Aquinas thinks that a human cannot have a gappy existence, whereas again Scotus remarkably enough held that the identity of S at two moments in time does not require that S or any part of S exist at all times between these two moments. For a discussion of Scotus’s position, see Cross (1999).
- 12 See, e.g., Buridan (2010) *De Gen.* 1.13 and (1509) *Phys.* 1.10, and Albert of Saxony (1999) *Questiones* 1.8, as well as references to other nominalist thinkers in Pasnau (2011: 695–702). Ockham’s theory is not as well developed, but it clearly tends toward the theories espoused by Buridan et al. (see Pasnau 2011: 692–695; Normore 2006: 751–753).

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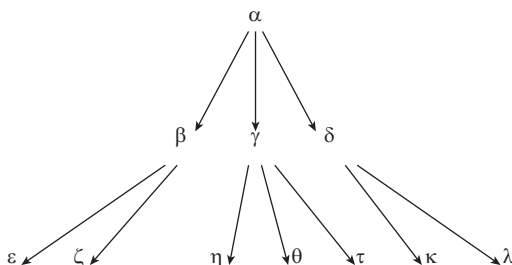
11

KINDS, ESSENCES, AND NATURES

Martin Tweedale

Classifying things into kinds or sorts was a pervasive feature of philosophy and science as it was carried out in the Platonic and Aristotelian schools of the ancient world, and it was this tradition which was relayed on to the schoolmen of medieval Europe and almost universally accepted by them as essential to rigorous thought. Understanding medieval scholastic philosophy, then, requires that we know what classification meant to them as well as what problems and disputes arose in connection with it.

In a very broad sense, any grouping of a domain of things into classes, no matter how much these classes overlap in their membership, can be called a “classification,” but from Plato on the tradition we are describing here demanded a more rigorous system of classes, one which consisted of a hierarchy starting from the class of all the things in the domain, dividing that into mutually exclusive sub-classes, and each of these again into similar sub-classes, until one reached classes for which further division was not called for. It was always assumed that this series should not proceed ad infinitum. The result is a proper taxonomy of the domain with a “tree-structure” that branches from a single all-inclusive taxon into taxa of increasingly restricted extensions. At each level of branching, the taxa are mutually exclusive and jointly exhaustive of the taxon they divide. The following diagram illustrates the sort of schema that results.



α is the all-inclusive taxon which divides into three sub-taxa, β , γ , and δ , and then each of these into further sub-taxa. At each level, the taxa are mutually exclusive but jointly exhaustive of the domain. In what follows, the word “kind” will be used in a narrow sense as synonymous with the technical term “taxon.”

In Greek and Latin, the same word ($\gamma\acute{\epsilon}\nu\omicron\varsigma$, *genus*) designates a kind, but in the traditional taxonomy, that term has the more restricted meaning of a “genus” (pl. genera), i.e. a kind which

is divisible into sub-kinds. A kind which is the result of division of a genus is called a “species” (pl. species) of that genus. In the aforementioned diagram, α is a genus, but not a species of any genus. (Such a genus is often called a “highest” genus.) β , γ , and δ are all genera, but are also species of α . The kinds at the lowest level are all species of their respective genera, but not themselves genera. (Such species are often called “lowest” species.)

It is in principle possible that the same domain might be organized into more than one taxonomic scheme of this sort, but in the Platonic–Aristotelian tradition the scholastics inherited, it was always assumed that in a proper science only one such scheme was the correct one for the domain in question. It was also assumed by nearly everyone that any species was *definable* by giving its genus and then a characteristic, or conjunction of characteristics, which belonged to all the members of the species being defined and not to the members of any other species that fell under the same genus as did the species being defined. This feature (or conjunction of features) was called the “difference” (*differentia*) of that species. If the definition was genuinely scientific, it was required that it be impossible for something to belong to the species being defined but not possess that species’ difference, or not also belong to the genus of that species.

It is important to understand that this sort of definition of a species is not a mere explanation of the meaning of a word,¹ but the result of an inquiry into the best way to develop a taxonomy for the domain of things under investigation. Obviously, in some domains, this would require a good deal of careful observation of the things themselves; a mere reflection on what a certain word is understood to mean would not be enough. It was accepted by all the scholastics that if such definitions were the right ones, they would be *necessary* truths of the form: “Everything which is a β is an α with the feature Δ ,” where Δ is the difference of species β and α is the genus. Examples of such definitions are surprisingly rare, but one which is repeated ad nauseam is “Everything which is a human is a rational (i.e. thinking) animal” where “rational” (or sometimes “rational, mortal”) designates the difference.² Necessarily, then, if a thing belongs to a given species, it will possess the difference of that species.

But can there be more than one definition of a species simply by having alternative differences? There might well be several characteristics each of which belongs to all members of the species, and to nothing else that falls within the genus of that species, and the possession of which is a necessary requirement for belonging to the species. The common example is the capacity for laughing (*risibilitas*), which was thought to be something that necessarily anything would have to have if it were human. On this matter, the scholastics relied heavily on Porphyry’s distinction between differences and mere characteristic features (*propria*, often misleadingly translated as “property”).³ The latter were like differences in that they necessarily went along with membership in the species and they distinguished that species from all the other species of the immediately higher genus, but they were not *definitive* of that species. An example from geometry might help here: the feature of having angles that sum to two right angles applies to all triangles and to no other kind of closed, rectilinear, plane figure, but it is not what defines a triangle as a triangle. The proper *difference* is having three sides. But again, one might wonder why not make having three angles the difference. Although for the most part the scholastics assumed that for each species there was just one correct difference, and thus one correct definition, no less a figure than Ockham challenged that conception.⁴

In addition to differences and characteristic features, there could be features that belonged to anything that was a member of a species but also to other things that fell under the species’ genus as well. Where it was necessarily the case that if anything was a member of the species it would have such a feature, then that feature was categorized as a *necessary accident* and opposed to features which belonged just to some members of the species and were *accidents* full stop. The five classes that Porphyry mentions, viz. species, genera, differences, characteristic features, and accidents, were classes of what the scholastics called “universals,” and effectively demark what was referred to by the term “universal” in medieval philosophy.

All the above can be handled by a logician without making much in the way of ontological assumptions about the things being classified. Certainly, problems will arise for the assumption that there is a single correct taxonomy for the domain if the items in it differ merely by variation along certain *continuous* parameters, in the way colors do, and some of the scholastics were aware of this difficulty. Also, the domain has to consist of individuals clearly distinguishable from each other, and in some areas of investigation that requirement may not be met.

Another sort of question which seems to demand delving into ontology is “What exactly are these ‘kinds’ the logicians are constantly talking about?” Or further: “What are all these ‘universals’ that they mention?” The naïve answer that kinds are classes is easily refuted: when we are dealing with things that come to be and perish, since then the membership of the kind can change over time, even though we still have the same kind, but a class, properly speaking, is defined by the members and perishes when any member of it does. Likewise for the other sorts of universals mentioned.

One frequent solution to this, especially in the eleventh and twelfth centuries, was to treat all the above as words and turn logic into a discourse about words. The word “animal” (or whatever translates it in the language you want to deal with) is, on this approach, a genus as well as a species of the word “living being.” Words themselves are individuated not just by their physical form, but also by the meanings language users have imposed upon them.⁵ This means that there were no kinds before there was a language and, unless two languages share the same kind-words, the logicians who traffic in one of those languages will be dealing with different kinds than the logicians who traffic in the other, even though the taxonomies used are equivalent. But for the logician who is only interested in purely logical questions, these counter-intuitive consequences need to pose no insurmountable problems.

Inevitably, however, for the scholastic philosopher who is trying to develop sciences of the real world, the logical schema of taxonomy described earlier will invite ontological questions, for that schema was taken to be a sort of classification requisite for a properly objective and scientific treatment. For example, the assumption that the domain being classified admits of just one correct taxonomy becomes the view that in many domains the things themselves divide themselves up in a taxonomic way and the philosopher’s job is to uncover just where those already existent divisions lie and how to make them explicit in the definitions of species. In the case of natural things (as opposed to artifacts), the investigator must try to divide nature “at the joints,” to use Plato’s memorable metaphor.⁶ All the scholastics accept that in the most important areas of natural science, these “natural joints” exist, so that kinds are in a way already there in the natural world before we begin to think about it. It is a short step from this position to claiming that the natural kinds which we are trying to define must themselves be things that exist in the world independently of thought and language. This is the general claim that all *realists* about kinds make, and is definitive of realist positions in the dispute about the ontological status of universals, where a universal is, as was said, any member of one of Porphyry’s five classes, and especially any kind. The opposed position is the *nominalist* one which claims that something can only be a universal by having a signification, and hence the existence of universals is dependent on the existence of minds which bestow signification on things like physical sounds and thereby turn them into words.

It is important to note that neither side in this dispute doubted the existence of universals; to doubt that would have been tantamount to destroying the science of logic. What is at stake here is whether the things that are universals are such independently of and prior to the thinking which develops the taxonomies and definitions in which universals appear. It is a question about universality, not so much about the things that are universals. When Peter Abelard, for example, argues against various views which treat universals as things and also holds that universals are words of certain sorts, he is not implicitly claiming that some words are not things, but rather that no thing is universal unless that status is bestowed on it by thought and language. Nor is he claiming that

the business of defining a kind is just a matter of reflecting on the common usage of a certain noun; one has to empirically investigate and uncover a certain *status* or nature which certain things have independently of our thought about them. But, as he notoriously says, this *status* or nature is not one of the things in the world we are investigating; in fact, it is not a thing at all.⁷

Part of the ancient tradition was to think of universals, especially kinds, as wholes having parts, and the scholastics continue to use this metaphor. The parts of a lowest species are just the individual members of the species, while a genus has as its immediate parts its species. Following the mereological principle that a part of a part of a whole is also a part of that whole, ultimately any genus also has the individual members of its species as parts.⁸ This suggests a kind of realist position in which the universal is the whole collection of such parts, but of itself it provides no answer to the question of why we continue to have the same universal after some of the parts have perished and others come into existence, for in that case we definitely seem to have a different whole.

Another question that naturally arises for the sort of taxonomical method we have been describing is whether it applies to the whole of reality, or at least to all the things that are natural creations. Here, Aristotle's treatise *Categories* was taken by some to offer a schema for such an all-embracing taxonomy. There would be ten highest genera, the ten categories of substance, quantity, quality, relation, etc., and these would be broken down into species and sub-species in the required way. It was recognized that mere *entity* [*ens*] could not be an all-inclusive genus, since then there would have to be differences distinguishing under it each of the ten categories, but a difference is itself an entity and no difference of a species can be something that falls under the genus of that species. Hence, *entity* is not a genus. The argument here relies on a principle implicit in the tree-structure taxonomy we have been discussing, viz. that any member of a genus must be a member of one of its species. The taxonomy does not admit of a genus which immediately divides into both species and individuals.⁹ But the difference of a species cannot be a member of that species, nor a member of any of the other species that fall under the genus. (For example, the feature of having three sides cannot itself be an instance of a triangle nor of any of the other closed, rectilinear, plane figures like quadrangle.) Hence, the difference cannot be a member of the genus either.

But in fact it is very difficult to fit this taxonomic scheme onto the categories as Aristotle described them, and most scholastics were wary of such an interpretation. The logicians who were happy to see logic as a discourse about words interpreted Aristotle's treatise as part of that endeavor, and then the categories themselves became the words usually taken to name the categories. Some later thinkers interpreted some (like *substance*) but not all of the categories as genera of things in nature, and dispute about the correct way to interpret Aristotle's treatise continued throughout the medieval period.

However that dispute is to be settled, it was still evident that Aristotle's treatise recognized a difference in things between "substances," i.e. things which do not *logically* depend on something else for their existence (plants and animals are obvious instances), and other things that exist only by belonging to substances, like shapes and colors, and that the substances had some sort of ontological priority over those other things. This was accepted by all the scholastics, and hence it was thought by them to be particularly important that a taxonomic scheme be applicable to substances, whatever those substances might prove to be. As Aristotle's non-logical works became available from the mid-twelfth century onward, it became apparent that Aristotle accepted that natural organisms were examples of substances, and thus it seemed that they should admit of taxonomic classification and of definitions of their species. This, of course, involves numerous problems when it comes to handling the facts that organisms change dramatically in the course of their genesis, that they are subject to very disabling accidents while alive, and that there are things such as monstrous births. Aristotelian science can handle these only by focusing on the adult normal forms for creatures of each lowest species and basing classification on those forms.

So far as our topic is concerned, the most significant thesis forced on the scholastics by the acceptance of Aristotelian science was that natural kinds were such that whatever belongs to a kind cannot cease to belong to it without ceasing to exist. This is the doctrine known as “essentialism” in contemporary philosophy of the analytic school.¹⁰ Nothing in the logic of taxonomy as described earlier implies this. It is perfectly compatible with the taxonomic idea that we are confronted with isolable things which undergo changes that carry them from one species of a certain genus to another species of that genus, or indeed perhaps from one genus to a different genus.

In the early twelfth century, it was widely thought that the material world was composed of conglomerations of atoms, and that each such conglomeration was a thing that could undergo all sorts of transformations which might well mean that it ceased to be of a certain kind while not ceasing to exist. Also, it was accepted that some of the material entities that persist through change in their material constituents were at a fundamental level a succession of distinct things unified by a property that they all continued to possess. In other words, the familiar “things,” which we take to be members of the kinds ordinarily recognized, find their unity through change not by being a single basic persistent *thing*, but by the continued instantiation of the characteristics which make them be members of those kinds. But for Aristotle, who rejected atomism, the material constituents of the familiar things we say are animals, for example, are less substances than what they compose, and delving into material constituents does not lead to any ultimate basic things. Consequently, in the material world, the most basic things are the familiar ones and they cannot cease to be members of their kind, i.e. lose the features which make them be of a certain kind, without ceasing to exist.

Aristotle’s essentialism emerges from the following line of thought. Material substances that underwent processes of coming-to-be and ceasing-to-be (as well as the non-material ones that do not undergo such processes) had to admit of an answer to the question of *what* they were, and the answer was always a specification of a kind of thing they were, especially the lowest species to which they belonged. Now, since a thing cannot exist without being *what* it is, it cannot exist without being a member of whatever kind it in fact belongs to. This doctrine is often expressed by saying that kinds are *prior* to the individuals that belong to them, and it was extended beyond the realm of material substances to the entire realm of substance in general. Indeed, it carries over into the ontology of things which are not substances, but merely belong to them. In the realm of organisms, this essentialism of Aristotle’s rests on his teleological theory that there is an adult normal form which we describe in defining a lowest species and which the organism’s growth aims at attaining. Reaching that form and maintaining it manifests the “nature” (*natura*) of that organism, so that its nature and its kind are intimately related.

This use of the term “nature” occurs rarely if at all in the early twelfth century, when a nature could be either just any real basic thing or the character which something had to have to be of a certain kind. But by the thirteenth century, the new meaning became standard. Another term which shifts its meaning on account of the introduction of Aristotelian science is “essence” (*essentia*). Before 1250 among the scholastics, this word was a synonym for “thing” (*res*), but by the thirteenth century, it always meant whatever it is which makes a thing be *what* it is,¹¹ i.e. be of a certain kind, and whose possession by the thing is necessary and sufficient for its continued existence. To specify a thing’s essence is to say *what it is to be that thing*, and this, in Aristotelian philosophy, is just to give the definition of the thing’s lowest species.

The significance of this shift is brought home by noting that propositions that earlier had only a *de dicto*¹² necessity now have a *de re*¹³ necessity as well. For example, when we say by way of definition that a human is necessarily a rational animal, earlier all that this implied was that it is *necessarily* true that if something is a human, it is a rational animal. But now, given we are defining a kind, it implies as well that if something is a human, then that thing is *necessarily* a rational animal, in the sense that it cannot exist without being a rational animal. The necessity now belongs to the individual thing and not just to the truth of the definition of being human.

This development in the talk of natures and essences leads to ontological difficulties, and a good deal of scholastic metaphysics from the mid-thirteenth century onward is given over to differing attempts to resolve these problems. For example, is the essence of an individual just the same as the individual itself? But since the essence certainly does not include features accidental to the individual, it seems not to include what distinguishes that individual from others in the same species. Aristotle himself denied that an individual was definable in the sense that a proper difference could be found which would distinguish it from the fellow members of its species.¹⁴ This led most thinkers to believe that an individual was merely distinguishable at any given time by the accidents it had at that time. It follows that the *essence* of an individual of a given species would be indistinguishable from the *essence* of any other member of that species.

That, in turn, suggests that there is just one essence for all the members of a given lowest species, and this sounds very much like a realist theory of kinds or universals. But unfortunately, it also seems to imply that all members of the same species are really the same thing! It's just that the thing they are occurs simultaneously in different locations with different accidents attached to it depending on where and when it is.¹⁵ Not only is there something quite bizarre about this idea, but it seems to relegate the individual to a very meager status as the mere product of differing spatio-temporal locations. Nearly all the scholastics rejected this proposal, but the alternatives are frequently quite obscure, or involve problems of their own that opponents were quick to point out.

One of the most influential and subtle theories in this area was introduced to the West by the writings of the tenth-century Persian polymath Ibn-Sina, known as Avicenna to the scholastics. He theorized that there were three ways of talking about essences or natures: (1) as they are in and of themselves apart from any consideration of how they might actually exist; (2) as they exist in the mind; and (3) as they exist in things.¹⁶ So far as (1) is concerned, an essence is neither existent nor non-existent, neither a single thing nor many things, for the essence *of itself* does not favor either of the alternatives. This is not really a denial of the law of excluded middle, for what it amounts to is denying propositions prefaced by the phrase "Of itself," for example, the propositions "Of itself the essence exists," "Of itself the essence does not exist." These are not contradictory propositions, and hence both can be denied without offending classical logic. The point is really just this: it does not follow from the definition of a species that that species actually has any sort of existence, nor does it follow that it has no sort of existence.

But (2) an essence can be an object of thought and have what was called "objective being" (*esse objectivum*); in fact, philosophers spend much of their thinking hours thinking about them. In this way, the essence takes on the accident of indeterminacy, i.e. it is now definitely none of the individuals that might or might not belong to the species being defined. In the first way of thinking, it could not be said that the essence was not such and such an individual, nor could it be said that it was. But as an object of thought, it is something that any individual of the species in question must relate to as what stands as a single thing *over and above* the many particulars. In this accidental mode, the essence becomes a universal.

Finally, the essence can have real existence as the many individuals belonging to the species it defines. Here, we encounter the idea of something that is many things rather than one thing, a notion that the scholastics already knew from their reading of Boethius. By being drawn into material embodiment, the essence forsakes the unity it had as an object of thought, and also forsakes the neutrality between unity and multiplicity it had as being just itself, and becomes numerically many things. The core of Avicenna's proposal, then, is that anything that is true of an essence but is not entailed by the very definition of the species is *accidental* to the essence itself, and included in these possible accidents are real existence (*esse formale, reale, subjectivum*), existence as an object of thought (*esse objectivum*), universality, singleness, and multiplicity.

Avicenna's treatment of essences is close to what we would now call a theory of *types and tokens*. When we distinguish the letter "A" from all its physical occurrences, we are treating it as a type

and the occurrences as its tokens. Here, the letter “A” is very much like Avicenna’s essence when it is an object of thought. However, when we say that a certain token of “A” is that type, Avicenna would interpret this as meaning that it is *that which happens to be* a type, and that is the essence considered simply in itself. That many occurrences of “A” can be the essence of “A” does not mean that all those occurrences are some one thing and thus identical to each other, for the essence is not considered in itself a numerically single thing.

Elaborating on Avicenna’s idea, John Duns Scotus (1265–1308) said that of itself the essence had a “less than numerical unity,” and this allowed it to be the “common nature” of all the individuals belonging to the species in question.¹⁷ In fact, each such individual was ontologically constituted by the common nature plus whatever differentiates that individual from other individuals of the same species. It was at this point that Scotus radically diverged from his predecessors, for, instead of seeing an individual as distinguished by its accidents or its spatio-temporal location or the matter embodying it, he proposed that it had an “individuating difference” which functioned for the individual just as did the specific difference for the species.¹⁸ But in contrast to the specific difference, this individuating difference, he said, was inherently unknowable. An individual’s common nature was, on his theory, distinguished from its individuating difference with a distinction “grounded in the nature of the thing” (*ex natura rei*), i.e. not based merely in thought about the realities in question, but not an “absolute real distinction,” since it was not at all possible, even by divine power, for the individuating difference of that individual to exist without that common nature.

Scotus’s proposals mark a high-water mark in the sophisticated defense of realism, but they also engendered a nominalist reaction which in effect jettisoned the whole Avicennian approach. The chief proponent of nominalism in the fourteenth century was William of Ockham (1285–1347/9),¹⁹ who saw no point in making a distinction between an individual and its essence, discarded the idea of “objective being,” and held that there was no distinction grounded in the nature of things unless it was between two things which could exist independently of each other, even if only by divine power.²⁰ This last ruled out the kind of distinction Scotus had made between an individual’s common nature and its individuating difference. For Ockham, universals were no more than the mental concepts which composed a mental language and grounded the significance of spoken and written languages. The basic thesis of nominalism that universality depends on having signification was preserved, but in Ockham’s case, the basic signifiers were mental entities rather than the terms of overt languages.

Does this mean that the taxonomy so important to Aristotelian science is not the result of a discovery of the way things themselves are organized in the world prior to thought about them? In other words, did Ockham’s view demolish the idea that a scientific and correct taxonomy divides nature “at its joints”? It seems that Ockham himself did not think that any such radical conclusion followed from his nominalism. Rather, he claimed that identity in species is a relation which holds between many pairs of individuals independently of how we think about them.²¹ Relations themselves, he held, were not things existing *in addition* to the things they related; rather, the distinction between a relation and its relata was found only at the conceptual level. Nevertheless, things can be related to each other in reality prior to any thought about them, and such is the case when they are related as identical in species. Although his proposal was not elaborated by him in any detail, it seems Ockham thought that there are “joints” in nature but that they are created by these relational facts of identity in species which hold independently of taxonomic efforts. A realist can, and no doubt would, complain that Ockham has not explained how such relational facts are possible. To the realist, such relations between things are to be *explained* by the fact of belonging to some species, not something which *explains* that fact.

This debate between realists and nominalists was never resolved by the late scholastics and only receded in the renaissance as science moved away from the Aristotelian paradigm. However,

echoes of it can be heard in recent discussions of cladistics and species in the philosophy of biology, of the source of the necessity of laws of nature in the philosophy of science, and of natural kinds in metaphysics. The medieval disputes are likely best seen as the manifestation in that period of Western thought of a more general problem arising from the necessity for both ordinary and scientific languages to see various terms as referring to many real and very different things without becoming equivocal. The question then has to arise as to what maintains the unity of the term's meaning, and answering that leads to proposals and difficulties with which the scholastics would have been familiar.

Notes

- 1 The scholastics frequently distinguished “nominal” definitions from “real” ones, the latter being what science requires.
- 2 Where a conjunction of characteristics is used to differentiate the species, each conjunct is sometimes called a “difference” in a looser sense of the term.
- 3 Porphyry was a third-century neo-Platonic philosopher whose introduction to Aristotle's *Categories* was translated into Latin by Boethius and known to the scholastics from the eleventh century onward. Porphyry's discussion can be found in English in Spade (1994: 1–19) and Bosley and Tweedale (2006: 331–336).
- 4 See Ockham's *Summa Logicae*, pt. I, ch.26, translated in Loux (1974b: 105–108).
- 5 There exists in a modern edition a logical treatise (*Dialectica*) from the late eleventh century once ascribed to Garlandus Compotista (1959), but whose authorship is uncertain, which goes so far as to identify universals with the vocally produced sounds (*voces*) that words (*sermones*) are realized in. Its author may have been Roscelin of Compeigne, or someone from his school, since the doctrines resemble those ascribed to Roscelin. A portion of this work is translated in Bosley and Tweedale (2006: 340–348). See also Iwakuma (1992) and Marenbon (1992).
- 6 *Phaedrus* 265e.
- 7 The remark is made in his commentary (1919) on Porphyry's *Introduction* and elsewhere. See the translations in Spade (1994: 26–56), and in Bosley and Tweedale (2006: 349–362).
- 8 Such parts are called “subjective” parts to distinguish them from “quantitative” parts. Medieval mereology is discussed in Arlig (2012).
- 9 A species, however, might contain just a single individual member.
- 10 A modern defense of the view can be found in Wiggins (1980).
- 11 Also used in this sense is the term “quiddity” (*quidditas*). *Quid* in Latin means “what?”
- 12 The phrase means “about the proposition,” i.e. in this case, the necessity attaches to the proposition that a human is a rational animal.
- 13 The phrase means “about the thing,” i.e. in this case, the necessity of being a rational animal attaches to the thing which is a human.
- 14 This is one implication of his discussion in *Metaphysics* VII, ch. 15.
- 15 For example, Thomas Aquinas in his short treatise *On Being and Essence* (*De Ente et Essentia*), ch. 5 (1954) attributes the “multiplication of individuals within a single species” to “signate matter,” by which he means matter found at different definite places, the implication being that this gives the individuals accidents that distinguish them from other individuals within the species. See the translation of this work in Klima (2007: 227–249).
- 16 A full explanation of Avicenna's theory can be found in Tweedale (2013). See also Marmura (2005). For the Latin edition of Avicenna's texts, see (1977–1980).
- 17 Scotus's theory can be found in his *Questions of Book VII on Aristotle's Metaphysics* (1997), qu. 18. This is translated in Tweedale (1999: vol. 1, pp. 141–163), and commented on in vol. 2, pp. 589–625. Also partially translated in Bosley and Tweedale (2006: 382–386).
- 18 Scotus's theory of individuation can be found in his *Commentary on the Sentences*, the *Ordinatio* (1950–1973), Book II, dist. 3, pt. 1, qu. 6. This is translated in Tweedale (1999: vol. 1, pp. 226–254), and commented on in vol. 2, pp. 691–723. Also partially translated in Bosley and Tweedale (2006: 378–382). Another translation is in Spade (1994: 96–113). For more on individuation in the scholastic period, see Gracia (1984, 1994).
- 19 Ockham's arguments occur in two places: *Summa Logicae* (1974a), pt. 1, chs. 14–17, translated in Loux (1974b: 79–88), and in his *Commentary on the Sentences*, the *Ordinatio* (1967–1979), Book I, dist. 2, qu. 3–6,

- translated in part in Tweedale (1999: vol. 1, pp. 320–392), and commented on in vol. 2, pp. 786–872. Qu. 3 is translated in Bosley and Tweedale (2006: 387–393), and qu. 4–8 are translated in Spade (1994: 114–231). See also Adams (1987: 13–69) and Panaccio (1992, 1999).
- 20 Whatever does not involve a contradiction is something possible for God to bring about, even if it is not possible in the established order of nature.
 - 21 The relation of identity in species will divide its domain of entities into mutually exclusive classes, since it is an equivalence relation, i.e. reflexive, transitive and symmetric. But to get a taxonomy with multiple levels, it will be necessary to have in addition relations of identity in genus with different degrees of generality. Whether Ockham would have countenanced these is unclear.

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12

INDIVIDUATION

Daniel D. Novotný and Jorge J. E. Gracia

Individuation is an ambiguous word that is properly used in many senses. We focus on four that are relevant for medieval philosophy: metaphysical, epistemic, logical, and linguistic. In the metaphysical sense used here, it is a certain non-temporal process whereby a universal becomes an individual, e.g., *man* becomes Socrates. In the epistemic sense used here, it is a certain process whereby a knower discerns an individual, e.g., Plato discerns Socrates. In the logical sense we use, it is a certain process whereby a universal concept becomes an individual concept, e.g., the concept of man becomes the concept of Socrates. In the linguistic sense in the chapter, it is a certain way in which words are effectively used to refer to individuals, e.g., Plato uses “Socrates” to refer to Socrates. These four senses of individuation give rise to four distinct philosophical problems that are often confused and called by the same name: *the problem of individuation*. The metaphysical problem concerns the question of what makes something to be individual, the epistemic problem concerns the question of what makes someone to know something as individual, the logical problem concerns the question of what makes a concept individual, and the linguistic problem concerns the question of what makes a linguistic term pick out an individual. In all four cases, what we seek as an answer to these questions is referred to as the *principle* or (less frequently) the *cause of individuation*.

The problem of individuation is closely related to the problem of universals; it is its converse. Any metaphysical theory that grants some real status to universals has to confront the difficulties of accounting for individuality. The more the realism, the greater the need for, and difficulty in, accounting for individuality. The lesser the realism, the lesser the need for, and difficulty in, accounting for individuality. Indeed, it is common among authors who have a nominalist view of universals to regard individuality as primitive (i.e. unanalyzable) or essential.

Attempts to solve the problem of individuation presuppose an understanding of individuality (i.e. of its intension) and a determination of the beings or kinds of beings to which it applies (i.e. of its extension). Individuality (also referred to as *particularity* or *singularity*) is often understood in terms of various features: *indivisibility* into entities of the same species (e.g. Socrates is indivisible into this or that human); individual or numerical *unity* (e.g. Socrates is one, integrated whole, rather than an aggregate of many, such as a group of humans is, or a part, such as a nose is); *distinction* or difference from other entities (e.g. Socrates is not Plato or anything else); *division* or multiplication within a species (e.g. Socrates and Plato as members of the species *human*, together with other members, divide it); *identity* or sameness through time (e.g. Socrates remains the same man in spite of growing older), *impredicability* (e.g. Socrates, unlike *human*, is not predicable of this or that human); and *incommunicability* or non-instantiability (e.g. Socrates is not communicable to

other entities in the way *human* is communicable to this or that human, i.e. Socrates does not have instances like *human* has). These features (if explicitly distinguished) have often been regarded not as independent of each other, but as related in various ways.

In the Middle Ages, individuality was applied to various beings, their constituents, and kinds: some authors held that substances of whatever kind are individual (God, purely spiritual substances, substances composed of matter and form, and purely material substances), whereas their features (accidents or properties) were not; others held that features are individual, whereas substances are individual only derivatively, in virtue of their features; and still others held that both substances and their features are individual. The views were further divided with respect to the individuality of the constituents of substances, how individuality was conceived, and the status of individuality within individuals.

The different senses of individuality, the different problems indicated, and the different entities to which individuality is applied account for the fact that not everybody who addressed the problem of individuation in the Middle Ages addressed the same problem. It is one thing to account for the individuality of a substance, such as a horse, and another to account for the individuality of an attribute, such as Bucephalus's capability to run or the color of its mane. It is one thing to seek to determine what accounts for non-instantiability (i.e. that Bucephalus is not instantiable into other horses) and another to seek to determine what accounts for multiplicity within a species (i.e. that the species *horse* has many members). And it is one thing to try to identify the conditions on the basis of which something is individual and another to try to identify the conditions on which individuality is discerned. The matter becomes even more complicated when authors were not aware of these distinctions, or when they tried to solve several problems simultaneously and on the basis of the same principles or causes. Indeed, the very use of terms such as *principle* and *cause* in connection with individuation implies important differences as far as what is being sought, insofar as principles are sometimes understood to be internal (e.g. a property or an essence) and causes are sometimes understood as external (e.g. an efficient cause). So the very language in which the problem of individuation is formulated may indicate important differences in the way the problem is understood and in the ways in which it may be solved.

From the very beginning, medieval authors displayed considerable interest in individuation for at least three reasons. One was its relation to the problem of universals which was one of the most frequently discussed and debated philosophical topics in the period. The problem of universals raised the question of the status of universals. Do universals, such as *horse* and *dog*, exist outside the mind, only in the mind, or only as words? For example, does *horse* exist extra-mentally, or does it exist only as the concept of horse we use to think about horses in our minds, or does it exist only as the word "horse" we use to talk about horses? Another reason was the strong implications views about universals had for theology in general and the doctrines of the Trinity and the Incarnation in particular. Still another reason was the emphasis that Christianity places on individual persons, their identities, and individual personal responsibility. For these reasons, medieval authors paid considerable attention to individuality and individuation, sometimes in contrast to Greek philosophers, who could at times be generally more concerned with universality and universalization.

At one time or another, medieval authors discussed individuation in all four senses mentioned earlier, sometimes distinguishing some of them and at other times not. Often, they provided solutions to the problem of individuation that they took to be effective in more than one of these four senses. For example, they identified principles of individuation that they thought worked both for metaphysical and epistemic individuation—accounting for both individuals and the knowledge we have of individuals. Likewise, they conceived individuality in all the various ways mentioned, although the particular terminology they used may differ. When all these factors are taken into account, it is clear that the treatment of individuality in the Middle Ages is highly complex and that the variety and richness of opinions is staggering. Indeed, it is no exaggeration to say that

medieval authors anticipated most, if not all, major positions on individuation that have been subsequently discussed in the history of philosophy, even if the terminology they used does not always coincide with them.

The problem of individuation was introduced to the Middle Ages by Boethius (born c. 480; died 524/5) primarily in two works that were particularly influential: the *Second Commentary on Porphyry's Isagoge* and *On the Trinity*. The historical importance of these texts for future developments concerning individuation can hardly be overestimated. They provided the first formulations of the problem of individuation, introduced the terminology in which future discussions of it would be couched, and offered a theory that was generally adopted before the introduction of translations from more ancient sources became available after 1150 and continued to have adherents for a long time after. Commentaries on these two works in particular became the locus of discussions of individuation throughout the Middle Ages.

Boethius did not distinguish clearly between the four ways of formulating the problem of individuation identified earlier, although he seems to speak about all four. This lack of clarity haunted discussions of individuation until the thirteenth century, when some authors did distinguish among some of these formulations and offered different solutions to them. With respect to terminology, Boethius introduced terms such as “incommunicability,” “impredicability,” “individuality,” “particularity,” and “numerical difference,” although he did not clearly distinguish their meanings and in some cases interchanged them. This is the case, for example, with “impredicability” (a primarily logical term) and “incommunicability” (a metaphysical term), which are frequently interchanged. The indiscriminate use of terminology tended to support a lack of distinction between the four dimensions of the problem.

In the *Commentary on the Isagoge*, two views of the individuation of substances appear to be present: an accidental view, in which the individuality of accidents individuates the substance, and a bundle view, in which the uniqueness of the set of accidents considered as a whole is responsible for the individuation of the substance. In *On the Trinity*, no principle of individuation is explicitly given, but the variety of accidents belonging to the substance is identified as the principle of numerical difference, and in the last analysis, if other accidents fail to establish it, it is place. In short, the horse Bucephalus is individual, or numerically different, because of its accidents, such as a certain weight, color of mane, and so on, whether all the accidents are considered together as a unique bundle, or not.

This view understands individuality to be a kind of difference or distinction, it restricts the extension of individuality to substance, and it sees no distinction between the metaphysical problem of individuation and the epistemic problem of individual discernibility. It is an accidental or bundle theory that ultimately identifies the principle of individuation with place if other particular accidents or their bundle fail to function effectively. In modern scholarship, this view is sometimes dubbed the *standard theory of individuality*, for it was widely held in the early Middle Ages, counting among its adherents authors such as John Scotus Eriugena (born c. 810; died c. 877), William of Champeaux (born c. 1070; died 1121), Anselm of Canterbury (born 1033; died 1109), Thierry of Chartres (died ante 1155), and most other thinkers of the time to a greater or lesser degree.

The main opponent of the standard theory was Peter Abelard (born 1079; died 1142). Instead of relying heavily on Boethius's *On the Trinity* as others did, Abelard paid more attention to the *Commentaries on the Isagoge*. In his *Logic for Beginners*, Abelard criticizes the tenets of the standard theory because it is incompatible with Aristotelian substance/accident metaphysics, according to which a substance does not depend on its accidents, but rather vice versa. He anticipated the positions developed in late thirteenth and early fourteenth centuries by Walter Burley, John Buridan, and William Ockham who favored a view in which substances do not need a principle of individuation, but are individual essentially. Abelard is primarily interested in the logical or linguistic senses of individuation, in which it is the mode of signification of individual words. “Socrates”

is individual because it signifies discretely the man Socrates, in contrast to “man” which signifies non-discretely every man.

Abelard’s criticisms of the standard theory of individuality were effective to the extent that it may have prevented subsequent authors from holding an accidental theory of substance individuation in the strict sense. However, other historical events were going to introduce changes that also drastically altered the discussion of individuation after 1150. The newly translated works of Eastern and Western Muslim philosophers such as Avicenna (Ibn Sina; born 980; died 1037) and Averroes (Ibn Rushd; born c. 1126; died 1198), and Jewish philosophers such as Maimonides (born 1138; died 1204), as well as of Aristotle himself, changed the conceptual and methodological landscapes of the age and provided scholastics with an hereto unknown framework that was useful for their understanding of individuation. Within this apparatus, an individual material substance, such as a horse, is conceived as a composite of matter, substantial form, and accidents. Those who became familiar with this conceptual framework looked for the principles or causes of individuation among one or more of these constituents.

The position that Avicenna takes with respect to the principle of individuation of material substances is rather complex and not quite clear. On the one hand, he accepts that individuals must have a unique bundle of accidents at every moment of their existence, although the bundle is not always the same throughout their existence. On the other hand, Avicenna is aware of the fact that an individual is not equivalent to this bundle of accidents: there is the substantial form (also referred to as *quiddity*—whatness—or *natura* in Latin) as it exists in reality and there is the designated matter (i.e. *this* matter) and these play roles in individuation too. Moreover, Avicenna alludes to still another element in the constitution of a being, namely, the being of the thing, translated into Latin as its *esse*, or “to be.” This opens yet another possibility for individuation, although Avicenna does not seem to explore it.

Averroes follows Aristotle more closely than Avicenna with regard to individuation. He is less influenced by Neo-Platonism, and he states his position more clearly. For him, the principle of individuation of substances is the substantial form as present in the matter. In Bucephalus, it is the form of horse when present in the matter (i.e. when existing) that individuates *animal*. Unfortunately, this solution seems to be inconsistent with Aristotle’s metaphysics, and Latin scholastics did not waste much time in pointing it out. One reason they often gave was that, according to Aristotle, form was not of itself individual, but common, and therefore could not individuate itself, let alone anything else. The substantial form of Bucephalus is not of itself different from the substantial form of another horse, so it cannot be what makes Bucephalus this individual horse rather than another. The form of humans is what unites them as members of the same species, not what separates them as individuals. Of course, Averroes might want to respond that it is not the form in itself, that is, the universal *horse* or *human* that individuates Bucephalus or Socrates, but the individual substantial form of Bucephalus that individuates Bucephalus and the individual substantial form of Socrates that individuates Socrates. But according to Averroes’s critics, this does not go very far insofar as this line of defense leaves unidentified what individuates the substantial forms of Bucephalus and Socrates.

Maimonides in his esoterically conceived *Guide of the Perplexed* speaks of the individuation of both composite material entities and purely non-material ones. By the individuation of the first, he appears to mean multiplication within a species. To be an individual in this sense is to be a member of a species that is capable of multiplication, such as is the case with the species *horse* and *human*. The principle of individuation for these kinds of beings is matter. Heavenly spheres and other non-material beings are not multiplied within species, as material ones are, but they are still individual in the sense that each of them is one and separate from others. The principle of individuation of these beings, rather than of their multiplication within the species, is their intellectual motive powers. Because human souls lack such motive powers, they do not remain individual after death.

As noted already, these newly translated works of Aristotle into Latin and the commentaries on them by Muslim and Jewish authors changed the dynamics of philosophy in the thirteenth century. New philosophical alternatives became available and prompted a rethinking of the problem of individuation. Traces of the standard theory of individuality are still detectable in the work of authors such as Albert the Great (born c. 1200; died 1280) and Roger Bacon (born 1214/20; died post 1292), although their positions take into account the newer ideas. Their views share some common elements. Both maintain a role for accidents in individuation, but they reject accidents as the principle of individuation when this is understood metaphysically. The function of accidents is, rather, to make us aware of the distinction among individual substances. But there are also important differences between the two authors. For Albert, the principle of individuation of a material substance is matter, but for Roger, both form and matter play a role in it, in that they are co-causes of individuation. Elsewhere, Bacon seems to go farther still, arguing that ultimately it is God that causes individuals to exist as individuals. The change in terminology from principle to cause may explain Bacon's reference to God insofar as for scholastics God is ultimately responsible for the existence of created beings. But that should not necessarily eliminate the role that his originally identified factors, i.e. form and matter, played in individuation.

The distinction between metaphysical and epistemic principles of individuation made by Albert and Bacon is preserved by Bonaventure (born c. 1216; died 1274). He identifies matter and form together as co-principles of individuation of all created beings, including angels; the discreteness and distinction of individuals from each also result from both their matter and form.

Along similar lines, but with his usual clarity, Thomas Aquinas (born 1224/6; died 1274) distinguished the epistemic and metaphysical problems of individuation. Epistemically, the problem is to account for our knowing that something is individual. In his *Exposition on Boethius's On the Trinity*, Aquinas follows Boethius and identifies this as place for material substances. We know something is individual because of its place. Metaphysically, however, the problem becomes that of accounting for both the indivision and the incommunicability of an individual and its distinction from everything else. Aquinas apparently adopts two different positions with respect to the principle of individuation of material substances. On the one hand, he states that the principle is matter related to indeterminate dimensions, on the other that it is designated matter, that is, matter related to determinate dimensions. In the first case, Aquinas seems to be speaking about dimensions in general, or perhaps even dimensionality. In the second case, he seems to be speaking of the particular dimensions that something has. According to the first, a horse is individual because it is material and therefore subject to dimensions, and in the second because its matter has certain dimensions (i.e. occupies a particular place).

The problem with the first position is that indeterminate dimensions do not seem to be able to make a substance incommunicable or to distinguish it from other substances. The problem with the second is that the particular dimensions of material beings change constantly, as Avicenna had noted, and this creates a problem for the identity of the being through time. Still another problem goes back to Abelard, namely, that dimensions belong to the category of quantity and therefore are accidental to the substance, thus generating conflict with the priority that substance is supposed to have over accidents. These difficulties and the attempt to resolve them generated various interpretations of Aquinas's view.

Another difficulty with Aquinas's position is that it does not explain the individuation of purely spiritual substances, such as angels or God, for these substances have neither matter nor quantity. Even if one were to accept that matter and quantity may work in the case of material substances, not only individuating them, in the sense of making them undivided in themselves and distinct from others, but also in the sense of multiplying individuals within species, it does not explain the individuality of angels or God. If we are going to account for the incommunicability of these beings, that is, the fact that they are not like universals, then matter and dimensions, whether the

dimensions are general or particular, do not work. But then what is the principle of individuation for these other substances, and why is the principle of individuation of material substances different from that of spiritual ones? Is it possible to point to a principle that not only works for material substances, but also for purely spiritual ones?

The answer given by some of Aquinas's commentators is that it is the individual's act of existence, that is, *esse*. For Aquinas, this act is not formal in any sense and is really distinct from both matter and form insofar as it is really distinct from essence (*On Being and Essence*, ch. 4). So here we have a principle that may explain the incommunicability of everything: God, purely spiritual substances, composite substances, and material substances. Moreover, one could argue that there would still be room for matter and quantity in the theory insofar as these can be used to account for multiplicity within species of material substances, and for accidents in that these would account for individual discernibility. All this makes considerable sense, but it must be kept in mind that Aquinas does not explicitly defend the view that the principle of individuation, when individuation is understood as incommunicability, is *esse*.

In the last quarter of the thirteenth century, the problem of individuation became one of the most discussed topics in the Middle Ages and came to occupy a central place in the philosophy of the period. Various quodlibeta and entire treatises were written on it, including *On the Principle of Individuation*, attributed to Aquinas. Indeed, although universals continued to be an important topic of discussion, individuation often displaced it. Controversies surrounded not only the individuation of material substances, but perhaps even more so the individuation of spiritual substances. In 1277, the famous censure of 219 theses was issued in which three of the theses concerned matter as *the* principle of individuation. This censure fueled further discussions so much so that while previously universals took center stage and individuation was discussed in their context, for the next 50 years, the order was reversed.

The prominent figures who voiced views of individuation after the condemnation include Henry of Ghent (born c. 1217; died 1293), Godfrey of Fontaines (born ante 1250; died 1306/9), James of Viterbo (born c. 1255; died 1307/8), and others. Most of these thinkers rejected matter as the principle (or even a principle) of individuation, even though, as we shall see there were also those who did not.

For Henry of Ghent, individuation is doubly negative: it involves division from everything else and indivision in itself. The key to both is found in the individuality of separated substances which are individual in virtue of their existence or, more precisely subsistence, in reality. This, in turn, points to the role of God in individuation, since it is his creative act that makes a specific form not divided in itself and divided from everything else. In this way, Henry picks up some strands from Bonaventure and others, while rejecting any suggestion that matter, form, or matter and quantity are as such the principles of individuation. He applies this theory to all beings.

Henry's rejection of matter or matter and quantity as *the* principle of individuation was shared by Godfrey of Fontaines who offered views of individuation in terms of substantial form, although he acknowledged that continuous quantity contributes to individuation by disposing matter to the reception of the form.

James of Viterbo offered an even more syncretic solution to the problem of individuation by drawing on various elements of competing theories. He distinguished between two notions of numerical unity and assigned them two different principles. The first notion of numerical unity is to be understood as "singularity," that is, something being "a this." Its principle in material substances is matter under indeterminate dimensions (i.e. quantity); the role of quantity in individuation follows from the fact that quantity renders matter divisible and this allows for distinction among material substances. The second notion of numerical unity is to be understood as "perfection and completeness." Its principle is form; however, unlike the view of Averroes and others, it is not just substantial form, but the composite of the forms in the substance. This suggests that James

held a kind of bundle view, although not purely accidental, as it was with the standard theory in the early Middle Ages.

Widely different theories concerning individuality of both spiritual and material substances prompted John Duns Scotus (born c. 1266; died 1308) to pay close attention to the problem and to provide us with penetrating analyses and an original solution. Scotus is on the one hand committed to realism so that he gives common natures a robust status in order to safeguard the validity of knowledge, and on the other, he is also committed to the epistemic and ontological primacy of individuals. In light of these commitments, Scotus considers and rejects major theories of individuality (by which he means indivisibility into other things of the same kind and distinction from all other things) that had been proposed by his contemporaries or predecessors. He begins with a refutation of theories that argue that no special cause of individuation is required. The problem with this view is that it misses the fact that a nature (or form) is not individual of itself and, therefore, needs something else to individuate it. The rejection of the no-principle view leads to a further divide: the principle of individuation must be either negative or positive. The view that it is something “doubly negative,” since individuality means *indivisibility* in itself and *distinction* from other things, is no good insofar as it only describes the problem but does not solve it. Hence, we are left with positive principles such as existence, quantity, and matter. Existence and matter do not work because they are as common as form/nature and therefore cannot individuate it. Quantity does not work because quantity is posterior to substance and, therefore, cannot account for an intrinsic feature of substance. So what can be the principle of individuation?

Having eliminated the main principles that had been identified by other authors, Scotus is left with only one unexplored possibility, namely that the principle of individuation is *sui generis*. It is a principle whose function is to turn a quiddity, such as *horseness*, into this (*haec*) quiddity, i.e. this horse. Scotus derived the contrived term *haecceitas*, or thisness and used it occasionally (preferring, however, terms such as “individual difference” or “individual entity”). Strictly speaking, *haecceitas* appears to mean for Scotus the property of being individual rather than the principle responsible for individuality, but we may dispense with this terminological complication and mean by it the principle whose function is to bring to a nature the unity proper to an individual, i.e. to individuate the nature. (Its other function is to bring being or “ultimate reality,” to it, i.e. to actualize the nature.) Importantly for us, *haecceitas* is not quidditative, even though Scotus calls it a formality and compares its function to the function of the specific difference in the logico-metaphysical structure of the Porphyrian tree (it determines what is below it, is diverse from what is adjacent to it, and contracts what is above it).

How is *haecceitas* to be distinguished from the other components of an individual substance, such as the quiddity? For Scotus, the distinction cannot be real insofar as, if so, *haecceitas* would be a reality different from the quiddity and it would be difficult to explain the unity of an individual. And it would not do to say that it is merely conceptually distinct from the quiddity, insofar as this would jeopardize the reality of the individual. Scotus’s solution is to argue that *haecceitas* is “formally” distinct from the nature. This means that, although it cannot even be thought to exist separately from the quiddity, the definitions of the quiddity and *haecceitas* do not include each other. The *haecceitas* (thisness) of a horse (this horse) cannot be thought to exist separately from the horse’s quiddity (horseness), but the definition of the quiddity does not include *haecceitas* and the definition of *haecceitas* does not include the quiddity.

The prominence of Aquinas and Scotus made it difficult to ignore their views in subsequent discussions of individuation. There were plenty of supporters and critics, but even their followers did not always agree with their views, particularly on individuation, rejecting or modifying them to avoid the difficulties that they thought they encountered.

Among authors who followed Aquinas were Hervaeus Natalis (born 1250/60; died 1323) and Giles of Rome (born 1243/7; died 1316), although neither of them adhered strictly to Aquinas’s

position on individuation. Hervaeus argued that the indivision by which something is undivided in itself requires no principle other than the thing itself, although numerical multiplicity within the same species is centrally, but not exclusively, the result of quantity. Giles of Rome, an Augustinian, defended a more sophisticated version of Aquinas's view that identified the matter designated by quantity as the principle of individuation of material substances.

Although Aquinas's views were popular especially among his fellow Dominicans, not all members of the Order followed him on individuation. The famous dissenter Durand of St. Pourçain (born c. 1270; died 1334) argued both against matter *per se* and quantity as the principles of individuation of material substances. Durand defended the older view that material substances require no other principle of individuation than their causes, that is, matter, form, agent, and end.

Diversity of attitudes can be seen also in the early masters influenced by Scotus. For instance, Francis of Meyronnes (born c. 1280; died 1328) accepts Scotus's *haecceity* but is troubled by its alleged formal distinction from nature. Formal distinction occurs only between two quiddities (such as genus and specific difference) but *haecceity* does not have any quidditative content. Hence between *haecceity* and nature, a lesser than the formal distinction must obtain, which he calls "modal." Henry of Harclay (born c. 1270; died 1317) went even further in rejecting Scotus's *haecceitas* and the view that natures have a *sui generis* unity that requires an addition for them to be individual. Instead, he adopted the position that everything is singular by the very fact that it exists extra-mentally.

The views of the authors we have been discussing indicate a move away from identifying a principle of individuation that is either among the principles that already constitute a thing or that is different from the thing itself, as well as an attempt to move toward a principle that works for all beings, not just material substances. This trend continued and culminated in the second quarter of the fourteenth century in views that rejected the need to account for individuation at all and concentrated instead on explaining how a universal (concept) is formed. The major exponents of this kind of position are Peter Auriol (born c. 1280; died 1322), William Ockham (born c. 1285; died 1347), John Buridan (born c. 1295; died 1361), and others.

The problem of individuation does not arise for Auriol and he explicitly points this out. Individuals are individual by themselves and this "brute" fact does not require any explanation. Similarly for Ockham: everything is individual in and of itself and not through anything extrinsic to it. This includes entities that other thinkers viewed as universal, such as natures, mental concepts, and words. Natures are concepts and concepts are individual. Words and concepts are called universal simply because they are used to talk or think about many individuals. In themselves, they are as individual as a horse or the color of its mane. To be individual consists in the following: to be one, to be primarily diverse in the sense that there is nothing in it that is the same in something else, and not to function as a sign for other things. The center of Ockham's philosophy is the individual, but precisely because it is such, the individual is irreducible to anything else and ultimately cannot be explained.

Buridan conceives individuality in terms of indivisibility and distinctness. His position is similar to that of Ockham insofar as he also believes that there is no need to search for a principle of individuation in that things are individual of themselves. The principle or cause of the individuality of the individual is the individual itself. The problem of individuation then must be understood in other ways: as a problem of identity through time (accounting for individuality through time), as an epistemic problem (accounting for individual discernibility), or as a semantic problem (accounting for how a linguistic expression can effectively refer to an individual). In the first two cases, the solution is accidents or extraneous factors. Indeed, if these turn out to be the same at two different times, then no distinction can be made between the substances that have them. In the third, Buridan's account involves a direct relation between singular terms and the individuals to which they refer, which is what happens with proper names and demonstrative expressions.

It would be difficult not to note that views of individuation and its principle in the thirteenth and fourteenth centuries follow a similar pattern of development as those we find in the early Middle Ages, going from positions that identify the principle of individuation with various components of substances to views that, first, favor the elimination of any principle of individuation and, second, take a linguistic turn in which language is the key to accounting for individuality. In both cases, the development was halted by external factors. In the twelfth century, it was the introduction of new materials that became available in translation. In the fourteenth century, it was the impact of the Black Death in the medieval academy. Sophisticated discussions of individuation resurfaced again later, in the Renaissance and Baroque eras with Dominicans such as Tommaso de Vio (Cajetan; born 1468; died 1534) and João Poinset (John of St. Thomas; born 1589; died 1644), Franciscans such as Bartolomeo Mastri (born 1602; died 1673) and John Punch (born 1603; died 1661), Jesuits such as Pedro da Fonseca (born 1528; died 1599), Francisco Suárez (born 1548; died 1617), Pedro Hurtado de Mendoza (born 1578; died 1641), and many others. Some of the post-medieval scholastic discussions influenced modern non-scholastic authors and conversely. A systematic survey of these discussions would take us to a different age.

Further Reading

In spite of the extraordinary importance that individuation had in the Middle Ages, the monographs devoted to the exploration of this topic are very few. For individuation in the early Middle Ages, see Gracia (1988). This book contains a detailed explanation of the systematic framework outlined at the beginning of this chapter and has chapters on several authors mentioned as well as some others. For the Later Middle Ages, see Gracia (1994). This book includes articles on 28 medieval authors, many of them discussed in this chapter, written by a group of distinguished contemporary scholars. For the investigation of related epistemic issues of individuation, the main source is still Berubé (1964). In recent years, several specialized articles on particular figures have appeared, but we cannot provide here an exhaustive bibliography. For an exegesis of Aquinas's texts concerning individuation of material substances, including the review of the controversy concerning its interpretation, see Wippel (2000: 351–375). See also Brower (2017). For an explanation of Scotus's *haecceitas* and its reception (including a discussion of Ockham), see Cross (2010).

Apart from specialized articles on particular figures, only a few articles of a more general character have appeared. Among these are King (2000), which deals with the general problem of individuation; Pickavé (2007), which deals with medieval *quodlibeta*, including some of the authors discussed here; and Pini (2012), which deals with the problem of individuation through the prism of a medieval reaction to Aquinas's innovative view that every angel is unique within its species.

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PART III

Cosmology and Physics

13

CAUSALITY

Graham White

Philosophy was mostly practiced in the Middle Ages as an academic discipline and, consequently, in the milieu of a medieval university. At that time, the dominant mode of academic writing was a commentary on some authoritative text; what we would call philosophy occurred in what was called the arts faculty, where explicitly philosophical books were commented on, but also in the so-called higher faculties of theology, law, and medicine.

All of these factors meant that reasoning about causality was a dominant theme in medieval thought. Aristotle was seen as being very authoritative, and causal reasoning is pervasive in Aristotle. Furthermore, theology, law, and medicine are (or were in that period) very concerned with causality: medicine for obvious reasons, law because much of law has to do with agency, which is a causal notion, and theology because theologians deal with concepts like miracles, and miracles were defined in the Middle Ages in basically causal terms (Bartlett 2008). Now it is rather unfortunate that, with few exceptions, most of the modern literature on medieval thought concentrates on what was written by theologians, rather than by physicians or lawyers: there are probably treasures to be found in those sources, but few modern scholars, apart from specialists in law or medicine, have had the expertise (or the courage) to look.

Unfortunately, all of this makes the medieval literature somewhat obscure and confusing to the uninitiated. Commentaries are, of course, written in the order of the original text, which means that the interesting parts of the comments may not occur in any obvious place. This is particularly true of theological texts, many of which are commentaries on Peter Lombard's *Sentences*, which was a rather loosely ordered collection of theological citations. Thus, there are interesting discussions on the analysis of continuous change in the commentaries on a certain passage in the *Sentences* (Book 1, Distinction 17), a passage where Peter discusses whether the amount of divine grace that a person has can increase. There are similar situations scattered throughout the commentary literature where topics have been, as it were, hijacked and used to host subtle technical discussions. Modern editions and translations often have good indexes, and one should use them.

A related difficulty is that discussions of causality, and even quite general discussions of causality, tend to occur in contexts which are quite unfamiliar to modern readers. The discussion of continuous change in the context of the increase of divine grace is a case in point. Modern philosophers tend to know, for example, the way in which causal issues come into discussions of perception, and can deal with the way in which the literature on perception handles the interrelation of general issues of causality with specific perception-related issues. But it is much more difficult to arrive at a corresponding understanding of many of these medieval texts, even when they contain material which is quite unrelated to the theological issues which the texts are ostensibly about.

And, finally, the medievals were very concerned with logical argument. The medieval equivalent of the seminar was the disputation, in which one participant (the respondent) would undertake to defend a position, while others would attempt to disprove it using logical arguments, which the respondent would have to deal with (Angelleli 1970). This led to a great interest in questions of validity and consistency, rather than just truth and falsity: and it seems often as if positions were investigated for their logical interest, rather than solely for the pursuit of truth.

The World Picture

There are certain background assumptions about how the medievals saw the world which one has to take into account in reading their work.

Teleology

We begin with teleology. On the face of it, this is one of the issues over which medieval and contemporary philosophy differs most strikingly. The medievals generally believed that there was far more final causality in the world than we do: we, when we entertain talk of final causes or purposes, only do so in a limited number of cases (most of them to do with human actions or humanly made artifacts) in which final causality can obviously be reduced to efficient causality. The medievals, however, seem to have had no such inhibitions: for them, final causality was everywhere, although they also did think that, in many of these cases, final causality could still be reduced to efficient causality.

There are two main issues at work: both of them mark significant differences between medieval and contemporary thought, although neither of them is a result of naiveté on the part of medieval authors.

The first is that almost all of the medievals believed that the world was created by God for the purpose of the history that would unfold in it. So, in a sense, everything that happened in this world happened for a purpose. But this position does not entail, without further assumptions, that instances of final causality could not be reduced to instances of efficient causality, and the medievals were generally aware of this. Neither does this entail that the resulting teleology—that of things happening for a purpose—could be rationally proved starting from merely natural knowledge: certainly, some medievals (such as Aquinas) thought so, but those who thought so were generally those who thought that the existence of God could be rationally demonstrated, and, for those thinkers, some of their rational demonstrations of God would tend to rely on rational demonstrations of the existence of final causes.

Consequently, we see quite striking differences in the positions of Aquinas, on the one hand, and Ockham, on the other: the former believed both that the existence of God was rationally demonstrable, and that anyone who rejected divine causality would have to reject divine providence (Wippel 2000: 410). Ockham, however, does not believe that the existence of God was rationally demonstrable, and (as we shall see later) his position on teleology was somewhat different from Aquinas's.

The second is that almost all of these authors were very familiar with Aristotle. Now, Aristotle was very influenced by biology: it was, for him, the paradigm science in the same way that physics, or mathematics, is for us. There are many cases in biology where teleological explanation is appropriate: we explain, for example, many features of biological organisms on the basis of their function, and functional explanations are explanations by purposes. Similarly, if we consider the development of different species of animals from their embryos, or of different species of plants from seeds, we have cases where the end-states of a development are radically different, whereas the initial states are indiscernible to the naked eye. So teleological explanations seem quite natural

in these cases, and it is not surprising that, on the basis of these explanations, even physical events tended to have explanations which had a teleological feeling about them. Thus, for Aristotle, heavy bodies fell because their natural place was located downward.

Similarly, the ontological paradigm was quite biological in inspiration: things had natures, and

[a]ccording to Aristotelian metaphysics, natures are complexes of powers. When appropriately coordinated, the collective exercise of such powers converges on an end. In the sublunary world, elemental powers are simple and deterministic. Even where more complex living things are concerned, the “coordination” of their powers is “built-in” in such a fashion that—given relevant circumstances—they function to achieve their end.

(Adams 1996)

And, from such an ontology follows a normative view of events in the world: this coordination could succeed or fail. Even in the case of the motion of bodies, there is a basic distinction between natural and violent motions: in the former, bodies follow their natural inclinations, whereas in the latter they are constrained not to.

There is another, seemingly trivial but nevertheless very decisive, component of this world-view: it is the view that efficient causality happens because of agency. This would not necessarily be *rational* agency, but it would mean that interacting entities could be meaningfully said to have active or passive roles: as Sobol (2001) puts it, “[i]n the Aristotelian world, all change requires that something act and that something be acted upon.” We do not have this view: modern physics gives us plenty of examples of things which “just happen,” not because they have no causes, but because they arise (and maybe even arise deterministically) out of the complex interaction of a multitude of causes which it is impossible to assign active or passive roles to in anything other than an arbitrary way. Similarly, there are, in the medieval view, hard and principled distinctions between the intrinsic and the extrinsic, something which is, again, difficult to maintain in the light of modern physics.

In fact, this normativity, and this assimilation of causality to agency—rather than teleology *per se*—is what is genuinely pervasive in medieval thought. Medieval authors had varying views on final causes, and many of them were just as suspicious of unwarranted teleological explanation as we were. But they all tended to have a very normative view of events in the world, and, likewise, they all tended to attribute active and passive roles to interacting entities.

And, finally, this view of causality makes the theory of causality and the philosophy of mind much more similar in the Middle Ages than they are now. This is not for Kantian reasons—that, for example, causality is a product of our minds—but simply because the way that non-mental things caused stuff to happen was taken to be very similar to the way that minds caused stuff to happen. In fact, Buridan argued that, among natural sciences, psychology was the most certain, because “among other natural things the soul has the most being and is the highest object of cognition” (Zupko 2003: 212).

Form and Matter

Part of the Aristotelian ontology is the view that objects are composed of form and matter, and that change is to be accounted for by the acquisition of one form and the loss of another. It is, for us, natural to think of form as being like shape or like the configuration of parts, but this would be somewhat foreign to the Aristotelian world-view, according to which continuous substances were infinitely divisible, so that we can (for example) take some water and keep on dividing it: it will still be water, and still have the *form* of water, however small the pieces are. Form and matter should be thought of as explanatory primitives: many (but not all) medievals

thought that form and matter were really distinct, and that, by the power of God, one could imagine there to be matter without form. Duns Scotus believed this (Cross 1998), and so did Ockham (White 1984).

Matter and form, as we have seen, were used to explain change. A further (and logically independent) factor is that, in this sort of explanation, form was generally seen as active and matter as passive. Form thus became an important part of explanations of change and process in the natural world: in the traditional terminology, it was an active principle of change. So form took on a very important explanatory role: as usual, there was a range of possibilities about what that explanatory role amounted to (in modern terms, whether form was supervenient on more basic entities), but it was widely understood to have that role (Boler 1996).

In Aristotle, perhaps because of this explanatory role, form and matter were thought to be causes of things, as well as the other two causes (efficient and final causes). Form and matter were referred to as *intrinsic* causes, efficient and final causes as *extrinsic* causes.

Texts

We will, then, discuss medieval texts in which causal reasoning plays a part. The texts are by the “usual suspects”—Aquinas, Scotus, and Ockham—and by Nicole Oresme. This is not because they are the only medieval texts featuring causal reasoning, or because they are necessarily the best texts, but because these authors are quite readily available in modern editions and in translation: Aquinas, obviously, but also, as a result of new editions and translations, Scotus and Ockham. We include Oresme because he shows what happened to the medieval causal apparatus toward the end of the Middle Ages.

Text: Aquinas on Natural and Violent Motions

As we have said, causal notions in the Middle Ages tended to be quite strongly normed. One of the main normative distinctions was that between natural and violent motions.

There are two ways in which something can be ordained or directed towards something as if to an end: (1) by itself, like a man who directs himself to the place where he is going; and (2) by something else, as an arrow is aimed at a definite spot by the archer. Nothing can direct itself to an end unless it knows the end; for the one directing must have knowledge of that to which he directs. But even things which do not know the end can be directed to a definite end, as is evident from the arrow.

This can come about in two ways. (1) Sometimes what is directed to an end is merely driven or moved by the one directing it without acquiring from the director any form by which such a direction or inclination belongs to it. Such an inclination, like that by which the arrow is aimed by the archer at a definite target, is violent. (2) Sometimes what is directed or inclined to an end acquires from the director or mover some form by which such an inclination belongs to it. In that case the inclination would be natural, having a natural principle. Thus He who gave heaviness to a stone inclined it to be borne downwards naturally. In this way the one who begets them is the mover in regard to heavy and light objects, according to the Philosopher in *Physics* VIII (4, 225b35–256a2).

It is after this fashion that all natural things are inclined towards that which is suitable for them, having in themselves some principle of their inclination by virtue of which their inclination is natural, so that in a way they go themselves and are not merely led to their due

ends. Things moved by violence are only led, because they contribute nothing to the mover. But natural things go to their ends inasmuch as they cooperate with the one inclining and directing them through a principle implanted in them

(Aquinas 1954: XXII.1, vol. III, p. 36).

Notice here that the genuinely *teleological* elements are quite moderate: nothing can genuinely direct itself to an end by natural powers unless it is sentient and *knows* the end. But the ruling concept here is being *ordered* to an end, which has very wide application. Furthermore, the distinction between natural and violent motions is defined by whether the principle of movement is intrinsic or extrinsic. We would, of course, interpret such a distinction to differentiate biological from non-biological cases: but for Aquinas there are plenty of cases of non-biological natural motions—i.e. those with an intrinsic principle of movement—of which the tendency of heavy bodies to fall is paradigmatic. And this doctrine is explicitly normative: things are naturally inclined toward “that which is suitable for them.” Thus, we get out of this a notion of natural place: the natural place for earth, for example, is at the center of the world, which is why most of the earth in the universe ends up there.

It is probably this distinction between natural and violent motions, and with it the remarkably normative account of change, together with concomitant ideas like natural place, that distinguish medieval from contemporary thought about teleology. In fact, even those parts of medieval causal thought which were quite strikingly anti-Aristotelean—for example, the medieval impetus theorists—still keep the apparatus of natural and violent motions (White 2013).

Text: Scotus on the Interdependence of Causal Relations

Scotus’s *Treatise on God as First Principle* is a work on natural theology, and specifically on the metaphysical priority of God vis-a-vis the world. This treatise is itself a summary of parts of a very large and intricate proof of the existence of God; it stands on its own, but it was developed as a component of a much larger structure.

In the treatise, Scotus analyzes relations of priority, and, as part of this analysis, he describes the relations between efficient and final causality. Consequently, he gives answers to some of the questions that contemporary philosophers will naturally want to ask, such as those about the reducibility of final to efficient causality. However, the answers he gives are likely to strike modern readers as rather strange, for several reasons.

The first is that, in this treatise (and in general: he wrote one of the great commentaries on Aristotle’s *Metaphysics*), he was interested in the large-scale causal architecture of the universe. He does, it is true, touch on Aristotle’s treatment of how we humans can cause actions which we do not intend as side-effects of actions which we do intend, but he does not go into it very deeply. Rather, his interest lies in what happens when we follow chains of efficient causality as far back as we can, and what happens when we follow chains of final causality as far forward as we can. If we do this, he argues, we will in either case arrive at one of the significant metaphysical constituents of reality.

The second is that he regarded Aristotle—and the tradition of philosophy which had come down from him—as the paradigm example of what unaided human reason could attain. The work of the philosophical tradition was so good that one could argue negatively from it: if there were no philosophical proofs extant of some particular assertion, then this assertion must be impossible to prove (1975: 176, Q. 7.57). This, of course, amounts to a very optimistic assessment of the power of unaided human reason. Nevertheless, Scotus did think that the philosophical tradition was wrong: specifically, it was wrong about God’s power to cause things. The Aristotelian position was that there is an entity called the prime mover which attracts the celestial spheres and causes them to

move (this is an instance of final causality), and that the celestial spheres cause all other objects to move (these are instances of efficient causality, and, in fact, the first members of all other chains of efficient causality). Consequently, according to Aristotle, chains of efficient causality and chains of final causality do not terminate with the same entities (Falcon 2006; Bodnar 2012).

Thus, if we ask whether God can cause everything *directly*, we would get two different answers depending on whether one asked a philosopher or a theologian. For a philosopher, God would be the Aristotelian prime mover, and would (by final causality) cause the celestial spheres to move directly, and would cause everything else indirectly, via the efficient causality of the spheres (Scotus 1975: 172f, Q. 7.43); for a theologian, God would be able to cause everything by efficient causality. In fact, God's creation of the world was taken to be an instance of efficient causality (ibid.: Q. 7.52). We should notice that, when Scotus talks in this treatise of final causality, he seems to have in mind either God or the Aristotelian prime mover, who are both the ultimate end of things in the world in the sense that, if one follows the chain of final causality, one ultimately gets to God or the prime mover. The Christian God (but not the Aristotelian prime mover) is also the first efficient cause of everything else. The treatise is, to a large extent, carefully neutral on these questions: the arguments work in either case.

Scotus sets his position out in a number of "conclusions." The ones we will be interested in are concerned with the relation between final and efficient causality. Since this is a work in natural theology, these conclusions are, in fact, about God: from this point of view, God is not ordered to an end, and neither is God an effect of anything. So the two conclusions state that these two properties (not being ordered to an end and not being an effect) are equivalent.

(Fourth Conclusion) What is not ordered to an end is not an effect.

The first proof is this. There is no effect which does not stem from some proper efficient cause; if something is not ordered to an end, it does not originate from a proper efficient cause; therefore, etc. The major is proved as follows. In no type [of causality] is the incidental first. Aristotle adequately expresses this in the second book of the *Physics* where he says that intelligence and nature as proper causes are necessarily prior to the incidental causes of spontaneity and chance. But what does not depend on what comes first does not depend on what is posterior (from the third conclusion above) . . . The minor is proved thus: every proper agent acts for the sake of an end, for it does nothing in vain.

(1966: 16)

The terminology of "proper cause" comes from Aristotle, who distinguishes between incidental causes (spontaneity and chance) and proper causes (nature and intelligence). Intelligence and nature are the efficient causes which act for the sake of an end: chance and fortune do not. Scotus takes it from Aristotle that incidental causes can be reduced to proper causes (Scotus 1966: 177), in such a way that, if our entity *X* (which has no final cause) had an efficient cause, then it would have a *proper* efficient cause. So, if our entity which cannot be ordered to an end had an efficient cause, it would have a proper efficient cause: but this efficient cause would then cause *X* for the sake of some end *Y*. But this would mean that *X* was ordered to an end, and we have a contradiction. Consequently, *X* has no efficient cause at all.

The crucial step in this argument is the assertion that, if something has no proper efficient cause, it has no efficient cause at all. We can usefully compare the aforementioned passage with the parallel passage in Scotus's large commentary on the *Sentences* (the *Ordinatio*). Its version of the first step reads as follows:

This . . . consequence is proved from the fact that every proper agent acts for the sake of an end as is said in [Aristotle], *Physics* II [c. 5, 196b17–22] . . . Now a thing cannot be produced

if no proper efficient cause of it exists, for the first of any kind of cause is never an incidental cause. This is clear from what is said of incidental causes, which are chance and fortune. These, according to Aristotle in *Physics* II [c. 6, 198a5–13] must be reduced respectively to the prior causes of nature and intellect as purpose, neither of which are incidental causes. Hence, whatever has no *per se* efficient cause has no efficient cause whatever.

(1950: 166, Ord. I, dist. 2, pars 1, qq. 1–2, translated in 1987: 47)

So here we have a description of the types of incidental cause (chance and fortune), and the assertion that there are always proper causes in those cases. To a modern eye, the details of this are still not clear: and, although we find plenty of assertions in medieval philosophy that incidental causality can always be reduced to proper causality, this tends to be explained by a relatively small number of stock examples. These arguments seem, from a modern viewpoint, to be quite weak: one of the decisive factors here is that modern physics gives many examples of incidental causality which cannot, in any simple way, be reduced to proper causality.

But there is also a more general question here: in the earlier passage in the *Treatise*, there is the statement that “in no type [of causality] is the incidental first.” What does this mean? Specifically, what does “type” (*genus* in Latin) mean? And what ordering does “first” refer to? As for the type of causality, this most probably refers to the fourfold division of causes. This would, in turn, mean that “first” cannot solely refer to temporal ordering. And, in fact, there is a relation of priority which is very important to Scotus’s metaphysics: that is priority by nature. As Normore says, “priority of nature is central to Scotus’s metaphysics” (1996: 167). And, in fact, we have a metaphysics (connected to a doctrine of how the creation of the world happened) according to which there is a priority in the constitution of the world, corresponding to a priority in God’s creative activity: this creative activity is divided into stages, called “instants of nature,” all of which happen at the same time but which have a logical ordering between them (Normore 2003). It is on this that the priority of nature is based: and, consequently, Scotus is saying here that proper causality is prior, by nature, to incidental causality. So the ordering to which he appeals is a modal notion, and the modality has to do with which entities are necessary for the existence of which other entities: it is a modality which, as Normore says, is “not semantic but metaphysical” (1996: 161).

We should, incidentally, notice that the idea of instants of nature was encouraged, or at least made technically possible, by a particular practice of disputation: to be precise, a particular sort of disputation called *obligations* (Spade 1982; Stump 1982; Normore 1996: 171).

The argument for the opposite dependency goes like this:

(Fifth Conclusion) What is not an effect is not ordered to an end.

The proof consists in this: that the end is a cause only to the extent that the existence of what is ordered to an end depends on this end as upon something essentially prior. This is clear since every cause *qua* cause is prior in this way. However the thing ordered to an end cannot depend for its being on the end, and in this way on something prior, unless—insofar as it is an end, and because it is loved—it moves the efficient cause to give it being, in the same way that the efficient cause would not bring something about in its genus [of causality] unless there were some end at work in its own [genus of] causality. Hence only what the efficient cause brings into existence for love of the end is caused by the end.

(1966: 18, translation slightly altered; see the parallel passage in 1950: 162f, Ord. I, dist. 2, pars 1 qq. 1–2, translated in 1987: 45)

The beginning of the argument is relatively uncontentious: causes are prior by nature to effects, and this is so even if we are talking of final causality. This is, says Scotus, true of “every cause

qua cause”; thus, up to now, we have Scotus’s idea of priority by nature. But then, says Scotus, the thing ordered to an end can only depend for its being on the end if it is *efficiently* caused by something, and this efficient cause must be moved by the end. So we have the Aristotelian world picture here (with a reminder of Conclusion 4 in the passage beginning “in the same way that the efficient cause . . .”).

Text: Scotus on Causality in the World

One possible response to the aforementioned arguments, especially the second one, is to say that, surely, this chapter is the final cause of my writing actions now, but the chapter does not exist right now, so the final cause surely cannot be prior to what it causes. When Scotus is not constructing arguments in natural theology—for example, in his commentary on the *Metaphysics*—Scotus holds that, for example, “[the end] is first according to the being it has in the mind of the agent, and last according to the being it has in matter” (1997: 349, Book V, q. 1, §29), which seems to fit the human creation of artifacts much better. So this adds a nuance to the discussion of the previous section: final causes are, in an appropriate sense, always prior by nature, but while with creation the final cause is God, with the production of artifacts in the world, the final cause is the idea of the artifact in the mind of its maker.

And it is in this sense that everything acts for an end:

Every agent *per se* (I add “*per se*” to exclude chance and fortune) acts for the sake of an end, according to the Philosopher in *Physics* II [196b17–19], where he divides an agent that acts for the sake of an end into [a] an agent that acts by nature, and [b] an agent that acts by the intellect. Chance occurs in an effect of a natural cause, but fortune befalls an agent that acts for a purpose. According to what is said in that same book [*Physics* II 198b10–11], nature acts for an end, and, according to *De Generatione* [in fact *Metaphysics* II 994b13–14] intellect similarly.

And there is one argument that holds for both: that every agent in whose action error can occur, acts for an end, but every *per se* agent is of this sort. In nature monstrosities occur, and in the intellect false judgements and habits.

Also, as one gleans from Bk. II of the *Physics* [994b13–14], that action which cannot attain the intended end is said to be in vain; but if no end were intended, no agent would act in vain; it is necessary, therefore, to assume an intended end.

Nor would the argument [have to be] about [actual] error. Therefore, if every *per se* agent could err, every agent then would act for an end. Such is a natural agent which can err. At times this is also true of one which acts through the intellect.

(1997: 398, Book V, Q. 1)

We are here quite definitely outside the area of natural theology, as the discussion of error makes clear. Nature is thought of along biological lines: it can produce “monstrosities” (i.e. imperfect individuals), and this possibility aligns it with the intentional actions of humans and others. The possibility of mistakes in both cases reveals the teleology at work. Here, we have an area of Duns Scotus’s work which is decidedly naturalistic, although not in a modern sense: agency is pervasive in both the human world and the natural world, and the concept of agency here is strongly normative. Actions, whether natural or human, can all, it seems, succeed or fail.

We see the same set of concerns—namely, of asking about purpose and teleology, and of comparing intentional and natural agency—also come to the fore in Scotus’s very nuanced discussion, in his commentary on the *Metaphysics*, of whether animals are capable of prudence (1997: 75ff, Book I, Q. 3). Here, the problem is that Aristotle says in *Metaphysics* I (980a25–b5) that animals are capable of prudence. But this raises a problem, because according to many medievals, prudence

was a rational capacity, and animals did not have reason. So Scotus argues that “prudence exists in brutes only metaphorically, and has to do with the things which are sought or avoided by natural instinct” (ibid.: 76). But there are further problems to be resolved, because some animals seem to act in a way that looks very like an exercise of prudence: as Scotus puts it:

many animals accomplish things by knowing in the same way that things are done by a reasoning man on the basis of his knowledge.

(*Ibid.*)

To this, Scotus responds:

To this it must be said that, although there is a certain similarity in the way that both man and animal act, nevertheless, this does not mean that their knowledge is similar, for a man acts from deliberation; and that which he elicits after deliberating could also be arrived at without deliberation and from the sense appetite alone. And while the exterior acts of both resemble each other, both would not be masters of their actions in the same way.

(*Ibid.*)

So we have here something very like Sellars’s distinction between the realm of nature and the realm of law (Sellars 1956): there are causal explanations for both animal and human actions, but humans (and, of course, other rational agents) are capable of deliberation, which makes them masters of their actions in a way in which animals are not. However, despite this similarity, there are profound differences: both sides of the divide admit normative criteria on the outcome of actions, which is very unlike Sellars’s picture. Furthermore, there is, in Scotus (Buridan’s position may be different on this issue—see Biard 2001), no tendency to align the human/animal divide with that between necessity and contingency. As Scotus says:

in us, prudence is a deliberative habit, not about the end aimed at, but about the means or ways of getting there, and it concerns not what has to be done of necessity, but with what can be done contingently. And so also in animals, it concerns something which could be otherwise, for instance, that [grain] could be gathered in this place or that, or from this heap or that . . . Or the spider builds its web in a place where there is a greater abundance of flies, or the swallow constructs its nest where it is more difficult to get to.

(1997: 76)

So, even though the motivation for the distinction between the human and the animal realm may be very similar in Scotus and in Sellars, the general picture is remarkably different: Scotus is working in an era which, unlike ours, does not have the idea of a causally closed, norm-free, realm of natural science. Norms are pervasive for Scotus: proper causes are prior by nature to incidental causes, and this introduces a normative dimension into the causal realm, and the distinction between normal and monstrous products of natural activities introduces a further normative dimension into natural productions.

Text: Ockham on Chance and Fortune

Ockham describes here what are called chance and fortune in the Middle Ages: as appears from Ockham’s distinction, these are basically unintended consequences. We should notice that these concepts are not what we would call chance and fortune (that is, genuine randomness or indeterminacy): there is a great deal of argument on indeterminacy in the Middle Ages, but it mostly

occurs in discussions of the semantics of future contingent propositions. However, the discussions of chance and fortune are interesting in their own right, since they cover what we would think of as the intentionality of agency.

One should note first that chance and fortune are agent causes. [This is so] because this appears from the way that the Philosopher proceeds, where he says that something happens by chance which happens beyond the intention of the agent in some way: and if such a thing is done intentionally by an agent, then it happens by fortune. And thus, since it is up to the agent to intend something and not something else, only an agent cause will be the cause of chance or fortuitous effects, so that there should be chance or fortune. However, a final cause is not said to be chance or fortune, because without it the effect will still take place. So, if someone goes to the marketplace to buy necessities, if, without intending to, he finds someone who owes him, that discovery is said to be by fortune. The cause of it is him going on his way to buy necessities, and, although this is the end intended by him, it is not the cause of that effect, namely finding the debtor; because if, when he went, he intended another end and not that, the discovery would nevertheless happen because there would be no change in anything but the end that he had in mind. And so the agent is the cause of that effect and not the end.

Two things follow from this. One is that that cause which is fortune is not asserted indeterminately or infinitely because there can be innumerable agent causes—for otherwise such an effect could not come about other than by a single agent—but because [the agent] can intend innumerable ends, of which none would be the cause of that effect which is [brought about] by fortune by that agent. And thus although fortune is said to be infinite and indeterminate only because of the innumerable ends [which can bring it about], however fortune is not a final cause nor can be reduced to that [kind of] cause, because none of them is the cause of that effect.

Another thing follows from the preceding: that there are effects which have no final cause, just as there are effects which at some time are not intended by any agent. For example, if someone went near to a wall, not intending that his head should be broken, if then a stone fell on his head and broke it, that fracture would be intended by no agent: this is because it is not [intended] by the stone, nor by the mover of the stone, nor of the person who went. And so it is an effect which lacks a final cause.

(1985: 344f, *Book II, c. 10, §3*)

Text: Ockham on Habits

Just as does Scotus, Ockham also has a pervasive metaphysics which influences almost all of his causal reasoning. He has a discussion of whether it is necessary to posit habits (1991: 234ff, *Quod. 3, q. 20*), which is typical of a great deal of his argumentation about causality in the natural world. The issue here is whether it is necessary, in order to account for the behavior of things in the world, to posit mental entities called habits. Now it is true that, in the texts which Ockham took to be authoritative (Aristotle, for example), there is a great deal of talk about habits. When Ockham (or whoever asked this question) does not want to deny that these texts are authoritative: rather, the question is about the *semantics* of these texts. Are there distinct things, habits, corresponding to the word “habit” in the text? Or can we apply some sort of eliminativist strategy?

Habits, in the Aristotelian literature, are mental entities which are generated by repeated acts of perception, repeated bodily acts, and so on. Such habits make the acts which cause them easier, or maybe even make them happen automatically: thus, they play a very similar role in mental causation, and they are located in the same mental faculties, or parts of the body, as the acts which cause them.

Ockham cites an argument against the existence of habits which goes:

Everything can be accounted for without habits. For when the object is present, acts can be elicited without habits. Therefore, there is no need to posit habits.

(1991: 234)

This may seem to be a typical application of Ockham's so-called razor—that "it is futile to do with more what could be done with fewer" (Adams 1987: 156)—but in this case Ockham does not take the eliminativist option:

I claim, first, that it is necessary to posit habits in the body. This is evident from the fact that after many acts have been elicited, the body's executive power is able to elicit exactly similar acts, acts that it was not previously able to elicit or at least not previously able to elicit so easily—as is clear in the case of scribes, weavers and other artisans. Therefore, in those executive powers either something is added or something is taken away. And it does not appear that anything is taken away. Therefore, something is added, and this I call a habit.

(1991: 234)

This argument depends on a particular ontology: the world is a collection of individuals, and, if there is a change, there must be more, or fewer individuals. In this case, there will be such things in the body, and practicing a physical skill will give you a new one.

But as well as habits in the body, we can think of habits in our mental faculties: Ockham considers the sentient appetite (the seat of bodily desires), the sentient apprehensive power (imagination, etc.), the intellect, and the will. Ockham says that we cannot prove that there are habits in the sentient appetite, because

all the things we experience to be in us after a large number of acts of the sentient appetite are such that we can sometimes experience them to be in us after some change in the body without a large number of acts of the sentient appetite.

(1991: 234)

As he explains elsewhere, he is talking of the way in which medicines, for example, can reduce (or, presumably, increase) bodily appetites, and also of the way in which habitual overeating can cause manifest bodily changes which accompany the increased appetite which overeating can bring on (1991: 154). Here, although there are certainly *changes* (and hence extra entities), they may well be bodily changes, thus not changes in the sentient appetite, which is part of the mind: consequently, they will not be habits.

However, there must be habits in the sentient apprehensive power, for this is how imagination behaves:

[A]fter a large number of acts of imagining, one comes to be inclined towards exactly similar acts, and one is in no way inclined to such acts before all the acts of imagining.

(1991: 235)

But there is a possible objection:

You might object that sometimes the imagination erupts into acts of imagining and acts of speaking without any similar previous acts. This is evident in the case of madmen and

lunatics, who have many acts of imagining and say many things that they never previously imagined when they were sane. Likewise, those who are asleep dream of many things that they had not previously imagined.

(*Ibid.*)

to which Ockham replies that it is a matter of how the outputs of these habits are arranged:

I reply that in such people there are many acts ordered in different ways. For such acts are ordered differently in health and in sickness, and they are ordered differently in one who is awake and in one who is asleep. But each of these acts [in sickness and in sleep] presupposes an act similar to itself in health and in the waking state. And it is in this way that one who is asleep seems to formulate propositions and syllogisms. For while awake, he has heard propositions and syllogisms and parts thereof, and then he imagines things that he heard as a child, and because of a different bodily condition he imagines such acts or sounds in a different order.

(*Ibid.*)

Ockham now seems to be talking of some sort of syntactic relations between habits, or between the things they produce: this can produce new results by combining parts which are, individually, similar to mental phenomena which have been produced before. These syntactic relations are not objects, but the fact that they hold of these objects is an objective fact about the world: it is a position strangely reminiscent of logical atomism (White 1990).

It is, incidentally, not clear that the acquisition of bodily skills does not require a similar explanation: we can, that is, learn adaptive skills which lead us, in a context-dependent way, to produce new bodily movements, or we can learn skills—dancing, for example—which consist precisely in the performance of syntactically structured series of bodily movements. However, there is a certain intellectualism about the philosophy of this period which would not encourage the consideration of complexly structured bodily acts of this sort.

Epilogue: Nicole Oresme

Nicole Oresme was a fourteenth-century theologian who wrote extensively on the natural world. He translated Aristotle's *On the Heavens* into French, expanding it with a good deal of commentary: in his commentary on Book I, he considers Aristotle's arguments that there can be only one world (276b14ff). One of these arguments uses the idea of natural place which we saw in the text from Aquinas: if there were another world than this one, then the heavy constituents of the other world would have the same natural place as those of this one, namely the center of *this* world, so they would naturally move there, which is absurd. Oresme dismisses this argument:

in this world a part of the earth does not tend towards one center and another part toward another center, but all heavy bodies in this world tend to be united in one mass such that the center of the weight, and all of the parts constitute one body . . . Therefore, they all have one single place. And if some part of the earth in the other world were in this world, it would tend toward the center of this world and be united with the mass, and conversely. But it does not have to follow that the portions of earth or of the heavy bodies of the other world, if it existed, would tend to the center of this world because in their world they would form a single mass possessed of a single place and would be arranged in up and down order . . . just like the mass of heavy bodies in this world.

(1968: 175)

We should note, however, that all Oresme is trying to establish is the *possibility* of other worlds than this one. He states quite firmly that there is, in fact, only one world:

I conclude that God can and could in His omnipotence make another world besides this one or several like or unlike it. Nor will Aristotle or anyone else be able to prove completely the contrary. But, of course, there never has been nor will there be more than one corporeal world.

(1968: 177ff)

In this respect, he was thoroughly medieval: he is investigating logical possibilities, and he thinks that Aristotle has erroneously concluded that a certain position (namely that there is only one world), although it is true, cannot be proven by reason alone. And Oresme still uses the concept of natural place, and with it the concepts of natural and violent motions.

However, as we see from the aforementioned citation, the concept of natural place has become somewhat relational: if earth from the other world were moved to this one, its natural place would become the center of *this* world. So the natural place of something is at least partly determined by the surrounding matter. And there are further adjustments to notions like up and down, large and small, which also become somewhat relativistic. So, although we still have a concept of natural place here, it is not the same as Aquinas's concept: things have moved considerably, albeit still within a fundamentally medieval world-view. These conceptual developments have led to many late medieval thinkers, and Oresme in particular, being labeled as "precursors of Galileo" (White 2013).

Conclusions

We have seen that, despite a number of common themes, there is a great deal of variety in the treatment of causality in medieval authors: in ontology, in the normative constraints applied to causal explanations, and in the role of causal explanations in philosophical explanation (whether, for example, a piece of causal reasoning formed part of a proof of the existence of God or whether it was simply an investigation of part of the natural world without, seemingly, any ulterior theological connection). One of the striking phenomena in the texts that we have examined is the normative character of a great deal of these causal explanations: despite a great deal of analysis of these causal arguments in the current literature, this normative character seems to have been very little remarked on. This is made even stranger when contrasted with the revival of interest in normative questions in a great deal of contemporary philosophy, both analytical and non-analytical. There may well be something worth investigating here.

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14

SPACE AND PLACE

Cecilia Trifogli

Space as Incorporeal Extension

The notion of space considered by Aristotle is that of something three-dimensionally extended and incorporeal: a three-dimensional extension that is neither a body nor dependent on a body, but existing unsupported, over and above bodies. The central role of space conceived in this way is that of providing a place or location for bodies by being something able to receive bodies and thus to be occupied by them. With an Aristotelian example, a wooden cube immersed in water would be received, according to this conception, in the region of space coextensive with it and bounded by the inner surface of the water, and it is this region of space that should be identified with the place of the wooden cube. A region of space that is not occupied by any body is also called a void.¹

Aristotle totally denies the existence of space conceived in this way, arguing that there cannot be an incorporeal extension. He maintains that extension does exist, but only in bodies, so that the only extension there is that of bodies. His most general objections to the existence of space aim to show that space would be a mere duplicate of the extension of bodies, indistinguishable from it, and useless for the purpose of locating bodies.²

The vast majority of medieval philosophers follow Aristotle in denying the existence of space and agree with his general motivations against it. Thus, John Buridan, one of the most influential Aristotelian commentators of the fourteenth century, argues that the assumption that incorporeal space is necessary to provide a recipient for corporeal extension is ontologically unsound, since it gives rise to an infinite regress:

Since that space is nothing else but dimension it would contribute nothing to the located body, because a located body has its own proper dimensions in virtue of which its matter, its form, and all its qualities are dimensioned; therefore, in this respect the located body does not require another kind of dimension. If one says that its own proper dimensions require other dimensions in which they are received, this is absurd, because by the same argument those other dimensions would in turn require other dimensions <in which they are received>, and so on *ad infinitum*, which is false.³

Thomas Aquinas raises a more radical objection against space as receptacle: commenting on Aristotle's example of the wooden cube, he argues that there is no way to account for the distinction

between the extension of the wooden cube and that of the incorporeal extension coextensive with it (its alleged place):

It does not seem that there can be any difference between the body of the cube [i.e., the three-dimensional extension of the wooden cube] and the dimensions of place or void. For just as the dimensions of place or void do not have sensible qualities, so also the dimensions of the cubic body are other than passions of this kind . . . However, two magnitudes of equal quantity cannot differ except with respect to position. For it is impossible to imagine that this line is different from that line equal to it unless we imagine each of them in a different position. Thus, if two magnitudes are posited together in space, one does not see how they can differ. Therefore, if two equally dimensioned bodies exist together, regardless of whether they have sensible passions or not, it follows that the two bodies are one.⁴

Aquinas's point here is that the notion of two coextensive extensions is contradictory because the property of being coextensive removes the only ground for distinguishing between extensions of equal size, namely, a difference in position. That is to say, two totally overlapping extensions are in fact one. Accordingly, corporeal extension, just because it is an extension, regardless of the fact that it belongs to a body, cannot be received in any other extension, be it corporeal or incorporeal. Thus, just as it is impossible that two bodies exist together in space, so it is impossible that a body and an incorporeal extension do.

Corporeal Extension: Its Ontological Status

While the existence of corporeal extension is regarded as self-evident in the Aristotelian tradition, its ontological status becomes a matter of dispute especially in the fourteenth century. The fact that wood, for example, is three-dimensionally extended is regarded as undeniable; what is controversial, however, is whether this is a primitive fact about wood or rather a fact that needs to be accounted for in terms of a thing, "the extension of wood," which is to some extent distinct from wood itself. Is it necessary to posit the extension of wood as a thing distinct from wood itself, although dependent for its existence on wood, in order to account for the wood's being extended? Or is it rather the case that wood has extended parts by its intrinsic nature so that it would be superfluous to posit an additional thing to account for its being extended? In Aristotelian jargon, these questions are formulated in terms of substance and accident. Wood is a substance, and a thing distinct from wood but dependent for its existence on wood as its subject of inherence would be a (real) accident or accidental form of wood. A paradigmatic and uncontroversial example of a real accident of wood is its color: the being brown of some wood is an accidental property of that wood that needs to be accounted for in terms of a thing, "brownness," which is a real accident (qualitative form) of the wood. Is the extension of wood a real accident of wood, just as its color is such an accident?

William of Ockham denies that this is the case. He holds that the extension of a substance is ontologically reducible to that substance itself, so that a substance has extended parts by its intrinsic nature and not in virtue of extension as a real accident of it. There is no need to posit an accidental form inhering in a substance that has the role of the formal cause of its being extended. For example, wood "naturally" comes with its parts so that whatever produces wood also produces its parts without having to produce a further thing necessary for wood to have parts.⁵

Ockham's arguments in support of his reductionist view are based on very strong and controversial assumptions about the infinite power of God like, for example, the assumption that not only can God preserve a substance and remove all its accidents, but he can also do this while preserving the extended parts of that substance. If God can do this, then positing extension as

a real accident of a substance becomes superfluous. Indeed, from this assumption, it follows that (i) as a result of this kind of divine action, there would be no change in the extended parts of that substance, (ii) even though any alleged accidental extension of that substance would be removed from it. This shows that it is not the case that extension is a thing that is required to account for the substance's being extended.

Ockham's reductionism about corporeal extension was totally rejected by his fiercest realist opponent Walter Burley, who defends the realist view that extension is a real accident of a substance and objects to Ockham's arguments that it is not possible even for God to remove extension from a substance and preserve its extended parts. According to Burley, this would amount to removing the formal cause of something and preserving the effect of such a cause, like, for example, removing whiteness from a substance and preserving its being white. In his view, there is no ontological difference between the being extended of a substance and its being of a given color in the sense that both properties can only be accounted for by positing real accidents that are formally responsible for these properties.⁶

John Buridan too, who is sympathetic with Ockham's ontological parsimony, is not happy with Ockham's view of corporeal extension. Instead of focusing on the highly elusive question of whether Ockham makes a legitimate use of the principle of the infinite power of God in this context, Buridan turns to the physical phenomena of condensation and rarefaction as the crucial case to test Ockham's position. Both these phenomena involve a change in the extension (volume) of the substance subject to them: when air is condensed, its extension decreases, and when it is rarefied, its extension increases. For a realist about extension, these changes in extension can be easily explained in terms of acquisition and loss of extension-things. What about Ockham? Can he give a satisfactory account of this change in extension? Ockham himself argues that he can give such an account in terms of the local motion of the intrinsically extended parts of a substance. When air is rarefied, its parts become more distant one from the other, and when it is condensed, its parts become closer, but no new extension-thing is added or removed from it. Buridan subjects Ockham's account to an accurate examination. He explores a number of specific ways Ockham's account can be interpreted and considers the empirical evidence in favor of and against it, but he concludes that it does not save the phenomena of condensation and rarefaction. In his view, the only way these phenomena can be saved is by positing that corporeal extension is a thing distinct from the substance that is rarefied or condensed and from the relevant qualities (heat, cold, and the like).⁷

Place without Space

While to many modern readers the notions of place and space may seem intimately connected, this is not so for Aristotle: he strongly denies the existence of space, but he affirms the existence of places or locations. In his view, bodies (that is, material substances) are in a place, but the place of a body cannot be a region of space coextensive with it, since there is not an incorporeal three-dimensional extension in which a body is received. There are, however, other bodies by which a given body is surrounded, and it is to the immediate surroundings of a body that Aristotle turns to define its place. According to Aristotle's definition, the place of a body *A* is the surface or limit of the body *B* that contains body *A* and is in contact with body *A*, that is, the inner boundary of the body *B* that immediately surrounds body *A*.⁸ Consider the ideal situation in which a body is surrounded in all directions by only one body: for example, the case of a fish totally immersed in water. Then, the place of the fish is the surface of the water in contact with the fish.⁹

Aristotle takes this definition of place to be a refinement of a common-sense notion of location, illustrated by the paradigmatic example of water contained in a vessel: water is located in the vessel so that the vessel is the place of the water contained in it, and the vessel is something that surrounds the water.

Ontologically, Aristotelian place is a two-dimensional extension, but not a self-subsistent one, since it belongs to a body, the containing or locating body, being its boundary. Thus, Aristotelian place does not violate the restriction imposed by the denial of space that the only relevant ingredients available to build a theory of place are bodies and their intrinsic extension. Aristotelian place also satisfies some basic desiderata for being a place: (i) it is separate from the body located in it, since it is something intrinsic to another body, the locating body; (ii) being separate from the located body, it can be left behind when the located body moves out of it and be occupied by another body (independence from the located body); (iii) being an immediate surrounding of the located body, it is proper to that body in the sense that it cannot at the same time locate within itself another body, namely, it is a proper place and not one common to other bodies.

Aristotelian Place and the Problem of Motion and Rest

While the vast majority of thirteenth- and fourteenth-century philosophers follow Aristotle's theory of place, they also point out that it contains some open problems. A very relevant one is that Aristotelian place seems inadequate to provide a satisfactory account of local motion (change with respect to place) and rest in a place. The nature of the problem is clearly illustrated by the following examples in an anonymous thirteenth-century commentary on Aristotle's *Physics*:

(i) If place and a surface were the same thing, then something that changes place can remain in the same surface. This is evident as follows: let us imagine that a body is carried about in flowing water in such a way that during all that motion a single part of water is in contact with that body. Then this body always remains in the same surface, and nevertheless it continuously changes place. (ii) Again, if place and surface are substantially the same, then a thing at rest would change place. The proof is that, if they were the same, then that thing which continuously changes its containing surface would also continuously change place; but something can continuously change its surrounding surface and nevertheless be at rest. For example, if a body were fixed in some continuously flowing water, then it would change the surface of its container and therefore a thing at rest would change place.¹⁰

Thus, Aristotelian place leads to the "paradoxes" of motion and rest: a body in motion can be in the same Aristotelian place and a body at rest can change its Aristotelian place. The obvious reason for this is that Aristotelian place is not "immobile," i.e. absolutely changeless. It is the surface of a body, but bodies are naturally subject to motion, and when they move, they carry their limiting surfaces, as well as all their other accidents, along. Accordingly, the paradoxes of motion and rest arise because of the ontological status of Aristotelian place as something dependent on bodies. They would not arise if place were a region of space understood as something existing over and above bodies. Still, the vast majority of medieval philosophers are not tempted to abandon Aristotle's theory of place in favor of a space-based theory. They rather try to give an account of the required "immobility" of place by introducing some modifications in Aristotle's original notion, but without introducing space.

The Cosmological Frame of Reference

In order to appreciate many medieval attempts to solve these paradoxes, it is important to understand why they are regarded as genuine problems. There seems to be nothing wrong to us in the idea that a body is both in motion and at rest, provided that this happens with respect to different frames of reference. So in the first example, a body carried in water is at

rest relatively to the frame of reference defined by the water immediately surrounding it but is in motion relatively to the frame of reference defined by the banks of the river. Medieval philosophers, however, implicitly assume that the choice of frame of reference is not a matter of convention. In their view, there is a privileged frame of reference such that only with respect to it, we can properly speak of a body being at rest or in motion. This is, so to say, the “cosmological” frame of reference, defined by the center of the universe (the center of the earth) and its celestial poles (north, south, east, and west). This frame of reference is also taken to be fixed, not subject to motion.

The assumption that the cosmological frame of reference is the privileged one entails that a theory of place that provides a good account of motion and rest must be such that a body in motion with respect to the cosmological frame changes its place and a body at rest with respect to that frame remains in the same place. Aristotelian place, however, does not satisfy this requirement, as the two “paradoxes” show. It seems that what is required is a place that is not in motion with respect to the cosmological frame. The problem then becomes how to modify Aristotelian place so that it satisfies this requirement of being fixed with respect to the cosmological frame. In the thirteenth century, the dominant solution to this problem is that of adding to Aristotelian place its cosmological coordinates, so that the place of a body is not simply the surface of the body containing it but this surface together with its distance from the fixed points of the cosmos. In the case of a body at rest, for example, it is because the distance of its containing surfaces from the fixed points of the universe does not change that such a body does not change its place, as an anonymous thirteenth-century commentator explains:

Therefore, a concave surface, whose centre is at a certain distance from the east pole, a certain distance from the west pole, a certain distance from the north pole and a certain distance from the south pole, can in this way be called place. Therefore, although where now there is air, water may submerge my hand—my hand remaining immobile—nevertheless its place remains the same, because the distance from the extremes of the world always remains one and the same. For the limit of air or water is not called place in an absolute sense, but in comparison to the extremes of the world. And thus, when air recedes and water comes in, the limit of both is said to be numerically the same place by means of the aforesaid respect.¹¹

Historically, this solution is already found *in nuce* in Robert Grosseteste and appears in slightly different versions throughout the thirteenth century.¹² The most influential version is that proposed by Giles of Rome, who introduces a distinction between “material” place and “formal” place—more precisely, a material aspect and a formal aspect of place—where material place is the Aristotelian place, that is, the surface of the containing body, whereas formal place is the distance of this surface from the fixed points of the universe. In terms of this distinction, the solution to the problem of the immobility of place is that while the material place of a body at rest may change, its formal place does not change.¹³

This solution, however, contains an obvious problem. In Aristotle’s ontology, the distance from the fixed points of the universe is an accident and hence has a subject. A common medieval principle about the identity of an accident is that this is determined by the identity of its subject, so that an accident cannot remain numerically the same if its subject does not remain numerically the same. As medieval philosophers often put this point, accidents do not migrate from one subject to another. In the present case, the subject of the distance from the fixed points of the universe is the containing body or its surface. Therefore, that distance cannot remain numerically the same if the containing body does not remain numerically the same. Thus, contrary to what is claimed in the passage earlier, if my hand is first surrounded by air and then by water, since air and water

are numerically distinct subjects, the distance inhering in them cannot be numerically the same. In terms of Giles of Rome's distinction, when the surroundings of a body at rest change, not only its material place, but also its formal place changes. That is to say, if the Aristotelian place does not persist, its "cosmologically" qualified counterpart does not persist either.

Equivalent Places

In the fourteenth century, the dominant attitude to the question of the immobility of Aristotelian place is a skeptical one. By that time, philosophers have come to acknowledge that the ontological status of Aristotelian place cannot be reconciled with the requirement of its immobility. They also maintain, however, that the admission of places subject to change does not make the "paradoxes" of motion and rest unsolvable. The new strategy to deal with these paradoxes is to provide a more sophisticated account of motion and rest, according to which it is not necessarily the case that a body moves when its surroundings change, and it is not necessarily the case that a body is at rest when its surroundings persist. The idea then is that only a certain class of changes or persistence in the surroundings of a body is relevant for defining its motion and rest. Not surprisingly, the relevant class is identified by appeal to the cosmological frame of reference.

One of the earliest and most influential proponents of this strategy is John Duns Scotus. He claims that the Aristotelian place is changeless, not absolutely but "by equivalence with respect to local motion." This is how he explains what he means by this formula:

(i) Although place is corrupted when its subject moves locally, so that, when air moves locally, the *ratio* of place in air does not remain the same as before . . . nor can the same *ratio* of place remain in the water that succeeds the air, because the same accident in number cannot remain in two subjects, (ii) nevertheless, the posterior *ratio* of place (which is in truth distinct from the preceding one) is the same as the preceding *ratio* by equivalence with respect to local motion. For, it is just as impossible that a local motion takes place from that preceding place to the posterior place as if these two places were absolutely the same place in number. In fact, no local motion can take place from an *ubi* to another *ubi* unless those two *ubi* correspond to two specifically different places, namely, to places that have a different respect, not only numerically, but also specifically, to the whole universe. Hence, those respects that are only numerically different seem to be one in number, because they are just as indistinct with respect to local motion as if they were just one respect.¹⁴

In part (i) of this passage, Scotus simply admits that the principle about the numerical identity of accidents makes it impossible for Aristotelian place to be absolutely immobile or incorruptible. In part (ii), he gives his own positive account of the immobility of place "by equivalence with respect to local motion." The general question that Scotus addresses in his account is that of giving an adequate definition of local motion. In particular, given that a local motion occurs from a place *A* to a place *B* (the initial and final terminus), Scotus intends to specify what condition two distinct places must satisfy in order to be the termini of a local motion, that is, in order that a local motion can occur between them. In Scotus's formulation, the condition is that the two places are not only numerically distinct, but also specifically different. The formula "equivalent with respect to local motion" is meant to apply to those places that although numerically distinct cannot constitute the termini of a local motion. The idea here is that two places that differ only in number can be considered equivalent to one and the same place with respect to local motion, because a local motion cannot occur between these two places any more than it can occur from one place to the same place. Specific difference of two places is required for local motion.

Crucially important in this context is how Scotus conceives the specific difference of places relevant to local motion. What makes two places specifically different in the relevant way is not the specific difference of the bodies to which they belong—for example, one place being the surface of air and another the surface of water—but a specific difference in their cosmological coordinates, that is, in their distance (in Scotus's terms, "respect") to the fixed points of the universe. Scotus's solution to the "paradox" of rest is then the following: a body at rest surrounded first by air and then by water is indeed at rest, that is, not subject to local motion, because despite the fact that the surface of air and that of water that successively surround it are numerically distinct and hence also their respective distances from the fixed points of the universe are numerically distinct ("accidents do not migrate from one subject to another"), the places associated with these surfaces are equivalent to just one place with respect to local motion, given that their respective distances from the fixed points of the universe are *equal*. Similarly, for the paradox of local motion: a body carried in water in such a way that it is always surrounded by the same portion of water is subject to local motion because, despite the fact that its Aristotelian place remains numerically the same, its place does not remain specifically the same in the relevant sense, given that the distance of the surface of water in contact with that body from the fixed points of the universe constantly changes.

The Axiom of Containment

The notion of distance to the fixed points of the universe is clearly the key one in most medieval accounts of the "immobility" of place. What is more, as the solutions offered by Scotus and many other fourteenth-century philosophers show, Aristotelian place as the surface of the containing body does not play any positive role in this context and in fact seems to make the explanation of the immobility of place unduly complicated. An account in terms of the distance between the located body itself, by-passing the surface of the body containing it, and the fixed regions of the universe would be much more straightforward. Note, for example, that since a body remains numerically the same subject throughout its rest, if the located body itself rather than the surface of the body containing it were the subject of the "cosmological" distance, the problem of accidents migrating from one subject to another would not arise.

The assumption that place is a container also creates a major problem of its own within Aristotle's theory of place. Aristotle's physical universe is finite and enclosed within the last celestial sphere in such a way that outside this sphere, there is just nothing. Being the outermost body of Aristotle's universe, the last celestial sphere does not have an external container. If being an external container is an essential property of place, then the last celestial sphere is not in a place—as it seems. This negative conclusion is not acceptable by Aristotle and his medieval interpreters, the main reason for this being that the last celestial sphere is subject to rotation, which is a kind of local motion.¹⁵ Accordingly, this serious cosmological problem provides an excellent occasion to challenge Aristotle's assumption that place is an external container. In this case too, the notion of place as distance seems suitable to define the location of the last sphere.

Despite these problems, the vast majority of medieval philosophers resist the temptation of replacing the Aristotelian notion of place with the notion of place as a distance. The idea that being an external container is an essential ingredient of a theory of place without space remains dominant in the Middle Ages.

This general tendency finds an eminent exception in John Buridan, whose interpretation of Aristotle's theory of place seriously undermines the importance of the axiom of containment. Buridan admits that a containing place has a privileged role in the location of bodies, but unlike Aristotle he considers perfectly legitimate many other ways of defining location. To illustrate this point with an example, Aristotle considers only two kinds of answer to the question "Where is

this boat?": the answer in terms of a proper place as something that contains this boat only, for example, the portion of water in contact with the boat, and the answer in terms of a container common also to other bodies, for example, the whole river. In both cases, the answer is given in terms of a containing place. On the contrary, Buridan points out that the answer need not be given in terms of a containing place. In Buridan's examples, to the question "Where is Robert?" we can reply that he is *outside* town or *on* a tree, and to the question "Where is the town of Saint Denis?" we can reply that it is *two miles north of* Paris. Buridan also remarks that the answers to the question about location in terms of a containing place are relatively rare.¹⁶

Once alternative answers to this question are admitted, the problem of the place of the last sphere becomes a pseudo-problem, as Buridan points out:

This question was regarded as most difficult, and the reason for this—I believe—is that they fail to distinguish the equivocation of the term "place." For, as has been said above, "place" is said in one way in a proper sense, that is, of something that contains the located body . . . in another way in a non-proper or less proper sense . . . that is, of something by which we judge that a body is in motion in virtue of the fact that that body changes its position relative to it. Therefore, if this definition is conceded, the question is very easy . . . Indeed, if we take the place of a body to be that thing by which that body appears to be in motion or at rest . . . the last sphere has a place, that is, the earth, or a stone or a wall.¹⁷

Thus, if we abandon the notion of place as a container and replace it with a much wider notion according to which the place of a body is whatsoever thing we use as a reference point to perceive the local motion or rest of that body, we can indeed find a place of the last sphere. Moreover, as the examples of Buridan illustrate, this need not be part of the cosmological frame of reference, like the central earth. It can also be a purely conventional frame of reference, like a stone or a wall. Accordingly, Buridan does not only challenge the idea of place as a container, but also that of a privileged frame of reference for local motion and rest. The result of his "simplification" of Aristotle's theory, however, is that of seriously undermining the physical significance of the notion of place.

Notes

- 1 Aristotle, *Physics* IV.8 (216a26–b21).
- 2 Ibid. See Hussey's comments in Aristotle (1983: xxvii–xxxii).
- 3 Buridan (2016: Book IV, q. 2, 216.17–23). The English translations of the passages from Latin works quoted in this chapter are mine.
- 4 Aquinas (1964: Book IV, lectio 13, 263).
- 5 Ockham (1986: 51–85); English translation in (2009: 47–79). On Ockham's reductionism about corporeal extension, see especially Adams (1987: 169–213).
- 6 Walter Burley (1501: Book I, fol. 15ra–vb).
- 7 Buridan (2015: Book I, q. 8, 87.22–90.23).
- 8 Aristotle, *Physics*, IV.4 (212a2–20).
- 9 On Aristotle's concept of place, see Morison (2002).
- 10 Quotation from Trifogli (2000: 176).
- 11 Quotation from Trifogli (2000: 177–178).
- 12 Grosseteste (1963: Book IV, 80–81).
- 13 Giles of Rome (1502: Book IV, fol. 81ra–b).
- 14 Quotation from Trifogli (2000: 185).
- 15 Aristotle discusses this problem in *Physics* IV.5 (212a31–b21). For an overview of some solutions proposed by Aristotelian commentators, see Trifogli (2000: 186–202).
- 16 On Buridan's view, see Trifogli (2011).
- 17 Buridan (2016: Book IV, q. 6, 254.1–5, 17–21).

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15

ATOMISM

Aurélien Robert

It is a commonplace to assert that atomism, the theory according to which reality is ultimately composed of indivisible entities, disappeared during the Middle Ages. This would be the result of a lack of knowledge relative to Ancient atomism before the rediscovery of Lucretius' *On the Nature of Things* by the Italian humanist Poggio Bracciolini in 1417 and Ambrogio Traversari's Latin translation of Diogenes of Laertius' *Lives of the Philosophers* in 1433, which contains Epicurus' *Letter to Herodotus* (Greenblatt 2011). These translations undoubtedly had a huge impact on Early Modern philosophy, as far as they lastingly changed our conception of the natural world (Wilson 2008). Nevertheless, medieval thinkers did have access to the atomist physics of Leucippus and Democritus through Aristotle's critics (from the twelfth century onward in the West and even earlier in the Arabic and Jewish traditions). Moreover, quite early, Western philosophers were aware of Epicurus and Lucretius' teaching through many intermediate sources, such as Cicero, Seneca, Lactantius, or Jerome to mention only a few (Jones 1989). What is more, Lucretius' poem *On the Nature of Things* never ceased to be copied and read during the Middle Ages, at least for the teaching of Latin grammar, and our modern editions are still based on these medieval manuscripts (Butterfield 2013).

Notwithstanding this substantial knowledge of the Democritean and Epicurean traditions, the fact is, however, that medieval atomists have usually little in common with their illustrious ancestors. As Andrew Pyle (1995) suggested, atomism can be defined by four central claims: (1) a commitment to indivisibles; (2) a belief in the existence of *vacuum*; (3) reductionism (every kind of motion can be explained by the motion of atoms); and (4) mechanism (or reduction of causality to efficient causes). In the Middle Ages, most of the atomists did not agree with (2)–(4). They were not materialists at all, and most often they adopted a mixed view combining atomism with Aristotelian hylomorphism. Likewise, they did not accept the basic tenets of Democritus and Epicurus' systems, such as the plurality of the worlds, the mortality of the soul, the negation of divine providence, or hedonism. So, even if their arguments for the existence of indivisible constituents (claim 1) are sometimes reminiscent of Ancient atomism, their aim was radically different.

Let us mention, for instance, the ninth- and tenth-century Arabic theologians of the *Kalām*, such as Abū al-Hudhayl and al-Nazzām, who introduced the concept of atom as a central piece of their physics and metaphysics in order to defend occasionalism and determinism (Dhanani 1994; Pines 1997). According to them, God re-creates the combinations of atoms at each and every instant of time, so that every being is totally dependent on his action. This is obviously and totally in contradiction with the Epicurean negation of divine providence. In the same way, the debates

in the Jewish tradition, from Maimonides to Hasdai Crescas, are for the most part a reaction to this radical form of atomism (Rudavsky 2000).

The situation in the Latin West is quite different. The supporters of atomism were also influenced by theological considerations about divine creation, the eternity of the world, or the infinity of God, but occasionalism and determinism were not their concern anymore. When, in the twelfth century, Peter Abelard and William of Conches explained that bodies, portions of space, or spans of time are ultimately composed of indivisibles (*indivisibilia* was the Latin equivalent of the Greek *atomoi*), i.e. points, indivisible places, and instants, they mainly referred to Plato's geometric atomism as developed in the *Timaeus* and to Boethius' paraphrase of Nicomachus of Gerasa's *On Arithmetic*, a Pythagorean treatise on numbers (Pabst 1994). They primarily endeavored to describe the creation of the world in terms of basic units in a coherent way with Aristotle's analysis of quantity in the *Categories*. Following this line of thought, they tended to equate the arithmetic units of the Pythagorean tradition with Plato's geometric atomism (Albertson 2014). While Plato affirmed that bodies are made of elementary geometric plane surfaces, the twelfth-century atomists considered these geometric figures to be ultimately constituted of indivisible points. Consequently, they sometimes explicitly explained the distance that separates them from Epicurus and his followers. As an example, William of Conches (1997) writes in his *Dialogue on Natural Philosophy* (I, 6, 16):

When the Epicureans said that the earth consists of atoms, they were correct. But it must be regarded as a fable when they said that those atoms were without beginning and 'flew to and fro separately through the great void', then massed themselves into four great bodies. For nothing can be without beginning and place except God.

Here, we will focus on later debates in the Latin West. For it is only after the translation of the whole Aristotelian corpus, together with some Greek and Arabic commentators, that atomism became a major philosophical topic. The first representative of this tradition is Robert Grosseteste (1175–1253), himself a translator of Aristotle and a major witness of the scientific achievements of his time (McEvoy 2000). Although he continued to be influenced by twelfth-century philosophers, he was marked by the Aristotelian tradition. In order to respond to Aristotle's arguments against atomism in the *Physics*, *On Coming to Be and Passing Away*, and *On the Heavens*, which were completed by Greek and Arabic commentators (Sorabji 1983), Robert Grosseteste introduced a new form of geometric atomism, inspired by the Platonic and Pythagorean traditions, into the larger debate on the nature of the continuum initiated in the Aristotelian tradition against Democritus and Epicurus.

Robert Grosseteste's intuitions were to be followed and developed by some fourteenth-century thinkers at Oxford and Paris, such as Henry of Harclay (c. 1270–1317), Walter Chatton (c. 1290–1343), William Crathorn (fl. c. 1330), Gerard of Odo (c. 1285–1349), Nicolas Bonetus (c. 1280–1343), Nicolas of Autrecourt (1299–1369), Marco Trevisano (d. 1378), and John Wyclif (1320–1384). In the following pages, we will only consider some positive arguments for atomism during this period, leaving aside the powerful critics addressed to them by their contemporaries John Duns Scotus, William of Ockham, Adam Wodeham, William Alnwick, John Buridan, Thomas Bradwardine, or Gregory of Rimini (for an insight into these critics, see Zupko 1993; Cross 1998; and Murdoch 2009).

Continuity and Measure

Robert Grosseteste's atomism is based on two different kinds of considerations. First, according to his Neo-Platonic metaphysics of light, natural bodies were produced at the beginning of the universe by the infinite self-multiplication of a single point of matter and form (1978: 10–11).

The diffusion of the first form was equivalent to that of light when multiplied in all directions from a single source. This is supposed to give to prime matter its corporeity and dimensions. According to this view, the world is constituted of an infinite number of point-like particles of form and matter occupying all possible places, so that there is no vacuum left in this closed universe. This, he affirms, “was the meaning of the theory of those philosophers who held that everything is composed of atoms, and said that bodies are composed of surfaces, and surfaces of lines, and lines of points” (ibid.: 12).

Such a geometric atomism is explicitly attributed to Plato in Aristotle’s treatise *On the Heavens*, III.1 (299a2–300a19): ultimate constituents of reality are indivisible points, not primary surfaces, like triangles, for instance. From a metaphysical point of view, the infinite multiplication of light/form into all possible indivisible points of matter is supposed to explain how bodies are made of surfaces, surfaces of lines, and lines of points. In other words, with the division of a continuous body into its ultimate parts, it would return to its elements that were initially multiplied when the world was created.

A second important aspect of Grosseteste’s atomism is his theory of measurement (Lewis 2005). Beyond the conventional system of measurement we ordinarily use for spatial or temporal magnitudes, such as miles and kilometers, square feet and square meters, or hours and minutes, continuous magnitudes have absolute sizes according to Grosseteste. These absolute sizes, if they exist, must be measured by a natural and objective system of units. In his *Notes on the Physics* (1963 IV: 92), Grosseteste suggests imagining a possible world in which only one single line exists: how could it be measured? It would be measured either by itself, or by one of its aliquot parts. Again, how could this part be measured? It would be measured either relatively to the whole or relatively to a smaller part, and so forth. In order to stop this infinite regress, one has to suppose that there exists some natural indivisible standard, according to which the world has been created and ordered from the beginning.

According to Grosseteste, only the numbers of indivisibles contained in the aliquot parts guarantee the objectivity of measurement. Be they continuous bodies, portions of space, or spans of time, magnitudes are therefore measured by indivisibles. Although human beings are obliged to measure a continuum with some aliquot part, because of their natural incapacity to cognize real indivisibles, the divine mind, which our author considers to be the “first measurer,” knows exactly all these units, their number, how they are ordered, and therefore the absolute size of any entity in the natural world. This is true for spatial magnitudes, which are measured by sizeless points, but also for time, which is measured by indivisible instants.

At the beginning of the fourteenth century, Henry of Harclay rephrased this as follows:

It is clear that in order to obtain the primary essential element of measure one must have recourse to what is ultimate and indivisible in numbers, namely to a unit. Thus, one quantity measures another only by means of being a unit, since for one quantity to measure another is for it to be related to it as a unit is related to some number . . . For one does not know how long a line may be from the fact that it contains four of its fourth or five of its fifths (for this we know of any quantity whose measure, however we do not know). Rather, it is necessary to know the quantity of that <fourth or fifth> part, which can be accomplished only by appeal to some simple and indivisible element of the <part>. Consequently, a perfect measure of a continuous quantity exists only by virtue of an indivisible of discrete quantity, namely by virtue of a unit, and similarly by means of an indivisible of continuous quantity, namely, <by means> of a point. Moreover, no quantity can be perfectly measured unless we know how many indivisible points it contains. Yet, since these are infinite in number, they cannot be known by a creature, but only by God, who has disposed *all things in number, weight, and measure* (*Wisdom*, 11).

(2008: 1027)

One important consequence of Grosseteste and Harclay's theories is that the difference in size between two continua can be analyzed in terms of the numerical ratio of the infinite numbers of indivisibles they contain. If a segment of a line is twice as long as another one, it contains twice as many indivisibles, even if the two are infinite in number. In other words, one infinite number of indivisibles can be twice as big as another one. As far as we know, Grosseteste is the first medieval author who conceptualized the existence of unequal infinities (Lewis 2012).

To reinforce their position about unequal infinities, Grosseteste and Harclay have recourse to numbers. Let us imagine a world, they suggest, that lasts eternally after its creation. If we now consider the correspondence between the number of years and the number of months, the former is 12 times as great as the latter. Hence, if the world never ceases to exist, the infinite number of years is higher than the number of months, days, hours, etc. Naturally, one could contend that there is a difference between an infinite by addition and infinite divisibility. Moreover, numbers constitute discrete quantities, so that they cannot account for the constitution of the continuum. But Grosseteste and Harclay assume that points in a continuum are like numbers in a discrete quantity. And if some supernatural power—at least God—can add these units with one another, then it is also possible to divide the continuum into these units. Accordingly, if one does not want to abandon the objectivity of measurement, the existence of real indivisibles and the possibility of comparing unequal infinities with some numerical ratio must be admitted without qualification.

Apart from Aristotle's genuine works, the main source of Robert Grosseteste's theory of indivisibles is the Pseudo-Aristotelian treatise *On Indivisible Lines*, which Grosseteste translated himself from Greek into Latin. As we shall see, this neglected text is of particular importance for the history of medieval atomism.

The Pseudo-Aristotelian *On Indivisible Lines*

The treatise begins with a series of five arguments for the existence of atomic parts in a line, the first of which being precisely directed at showing that the defenders of the infinite divisibility of a continuum cannot give a rational explanation of the differences in size among continuous magnitudes (968a2–9). In the same way as Lucretius in his *De Rerum Natura* (1947: I.615–626), the author uses a version of Zeno's paradox of large and small. According to this paradox, the divisibilists should assert that the small and the large, the few and the many, have exactly the same infinite number of parts. Consequently, they cannot account for the differences of size in continuous bodies or geometric figures. The argument concludes that only the large and the many are infinitely divisible, whereas the small and the few are only finitely divisible. But if it were the case, then there should be indivisible units in a finite line, i.e. atomic lines.

The author replies to this argument by affirming that the small is also infinitely divisible. Let us take a small segment S in a line L; if S is still a line, it is continuous and therefore infinitely divisible, at least into points, as the text clarifies (not in a genuine Aristotelian fashion). Therefore, S can be smaller than L and both S and L are infinitely divisible. This solution suggests two things: (1) that the ultimate unit in a line, if there is one, is the point and not an atomic line; (2) that it is possible to maintain the commensurability of two magnitudes even if they are infinitely divisible. This is probably the premise of Grosseteste's view on the measurement and composition of the continuum.

The text, however, also affirms that one should not deal with these questions in the light of numbers, and Grosseteste and Harclay cannot agree with the Pseudo-Aristotelian on this point. On the model of Boethius' *On Arithmetic*, they are prone, indeed, to assert that the science of arithmetic is the only way to understand how the continuum can be at the same time infinitely divisible and composed of indivisibles.

This might have been suggested to Grosseteste by the fifth argument in favor of atomism presented in *On Indivisible Lines* (968b4–21) and by the author’s reply (969b3–26). The argument runs as follows: for every two lines that are commensurable with one another, there is a unique and common measure, which is an indivisible line. The Pseudo-Aristotelian argues against this view in two ways: (1) there is no necessity in having a single kind of unit for the measurement of a magnitude; (2) some magnitudes are not commensurable, as it appears in geometry (the ratio of the diagonal to the sides of a square is irrational, for instance). This is, of course, a real challenge for an atomist. But, since Grosseteste admits the divisibility of the continuum into an infinite number of points and the possibility of unequal infinities, he can answer that if the ratio of numbers can be either rational or irrational (a whole number or a fraction), so it can be for magnitudes such as lines, surfaces, and bodies constituted by an infinite number of point-units.

It appears then that Grosseteste and Harclay believed, unlike Ancient atomists, that the natural world is a continuum and a plenum. Like Aristotle, they considered the continuum to be infinitely divisible, but it is infinitely divisible into indivisibles, not into divisible parts. The principal reason for that is the need of a natural and intrinsic measurement for all kinds of magnitudes. A first limit to the theory is the difficulty to understand how numbers, i.e. discrete quantities, can be applied to the continuum. A second is the concept of infinity involved in the discussion, which is not clearly defined. Indeed, Grosseteste and Harclay tend to affirm that to each infinite set of indivisibles corresponds an exact number, only known to God, so that what is infinite for us is in reality finite. Later atomists will be rightly puzzled by this weak and relative concept of infinity. This will lead many of them to subscribe to a form of “finitism,” according to which the continuum is only finitely divisible.

The Road to Finitism: Zeno’s Metrical Paradox of Extension Revisited

Zeno of Elea is mostly remembered for the four paradoxes of motion discussed in Aristotle’s *Physics*, which all deal with the notions of continuity and infinite divisibility (see Sorabji 1983: 321–335). Defenders of atomism also used another Zenonian paradox usually called “the metrical paradox of extension” (Grünbaum 1970) or “the paradox of measure” (Skyrms 1983). Epicurus used it in his *Letter to Herodotus*, but its most complete presentation is found in Simplicius’ commentary on the *Physics*. As they ignored these two texts, medieval thinkers might have reconstructed the argument from Aristotle’s remarks in *On Coming to Be and Passing Away* (I.2, 316a14–30). Here follows a possible wording of the paradox:

- 1 Every magnitude M is divisible into n parts.
- 2 M is equal to the sum of the n parts ($\sum x_1 + x_2 + \dots + x_n = M$).
- 3a Either the parts of a continuum have a zero magnitude
- 3b or a positive magnitude.
- 4 If (3a), then M should also have a zero magnitude, because from (2), it follows that M is the sum of n zero magnitudes, which is equal to zero ($\sum 0 + 0 + \dots + 0 = 0$).
- 5 If (3b), then either
- 5a M is finitely divisible, and (2) still holds true, or
- 5b M is infinitely divisible, and (2) no longer applies—at least if M is a finite quantity because:
- 6 The infinite sum of n positive magnitudes makes an infinite magnitude.

(1)–(3) are explicitly accepted by Grosseteste and Harclay. But if the indivisible units used—by God—to measure a continuous magnitude were sizeless points—be they finite or infinite in number—they could not account for its quantity. However, if one concedes that indivisibles have a minimal magnitude, then, from (2), (5b), and (6), the sum of these indivisibles should correspond

to an infinite magnitude, not to the finite sensible object we experience in everyday life. As a consequence of this paradox, both Grosseteste's and Harclay's atomism seem to fail, together with the Aristotelian theory of the continuum.

From a contemporary point of view, the resolution of this paradox would consist in denying the validity of the principle of additivity (2) and more specifically its application to an infinite series of items in (6). Anyhow, no one denied the validity of (2) in antiquity and it is likely that the same is true for a large majority of medieval authors. Another obvious option would consist in admitting that the continuum is made of a finite number of parts with a minimal magnitude. One possibility for defending such a theory is denying that a finite magnitude can be actually divided into and composed of an infinite number of parts. Indeed, following Aristotle's suggestion in *Physics* I.4 (187b13–188a5) and *On Coming to Be and Passing Away* (I.2, 316b33–317a1), one might conceive the existence of minimal parts beyond which no physical division can be made, even though these minima continue to be infinitely divisible, at least potentially, i.e. conceptually and mathematically speaking. As is well known, Epicurus and Lucretius used this distinction in their response to Aristotle's arguments against atomism (Furley 1967: 111–129). Such strategy can be followed along different lines. Physical atoms might be still divisible potentially into divisible parts (Aristotle) or only finitely divisible into indivisible parts (Epicurus). Again, the Epicurean option can be understood in two ways: either the minimal parts of the physical atom have a positive (although indivisible) magnitude or they are sizeless points.

The problem for the Aristotelian option is that the paradox can be repeated for potential parts. For even if the division never occurs, potential parts are conceivably divisible into divisible parts, i.e. with a positive magnitude. With regard to the Epicurean solution, the paradox seems to be blocked by the fact that the number of atoms and minimal parts is finite. But an Aristotelian could still object that if the minimal parts of an atom have some positive magnitude, they are still infinitely divisible, at least potentially. Another option is that the minimal parts of a physical atom are sizeless points. But then, how could one hope to escape from step (4) of the paradox?

A majority of fourteenth-century atomists after Henry of Harclay tended to adopt the view that the continuum is composed of a finite number of minimal physical parts (*minima naturalia*), which are composed of a finite number of mathematical indivisibles. Walter Chatton, Gerard of Odo, William Crathorn, and John Wyclif precisely used the metrical paradox of extension in order to deny the truth of (5b). According to them, if M is a finite magnitude, it is equal to the sum of its n parts (2), so that n is necessarily a finite number (Robert 2010). So, when Grosseteste and Harclay said that the precise number of indivisibles in a continuum is only cognized by an infinite divine mind, they meant this number to be finite. What is usually left unclear is the nature of the parts of the continuum. Does the division presupposes the parts or creates them?

Division Everywhere: Potential and Actual Parts

At the beginning of *On Coming to Be and Passing Away* (I.2, 316a10–317a12), Aristotle presents one of the arguments Democritus used in favor of his atomism. Suppose, he says, that a body or a magnitude is divisible everywhere and that its division is a real possibility. What is left after the division? Divided parts are either magnitudes, or points, or nothing. They are not magnitudes since they are still divisible. They cannot be points, since the addition of sizeless points cannot give rise to a quantity. Indeed, points cannot touch each other since they have no parts. Finally, they are not nothings, because a figure or a body cannot come out of nothing. Democritus' conclusion was that there must exist atomic bodies and magnitudes, whereas Aristotle contends that bodies and magnitudes are divisible everywhere potentially, though not actually.

In order to respond to this new paradox, Walter Chatton endeavored to define more accurately the ontological status of the parts of a continuum (Murdoch and Synan 1966; Robert 2010).

Potential parts, he asserts, might exist after the division, although they do not exist separately from the whole before division. Actual parts, however, exist on their own, independently of any bigger whole. Hence, according to Chatton, it is a contradiction *in adiecto* to affirm that a continuous body or magnitude is composed of actual entities. If it were the case, the result would be a mere aggregate of independent atomic parts, as in Democritus' theory. In the same way, he continues, one has to criticize Plato's geometric atomism if it is understood literally. Surfaces, lines, and points are not actual parts of the continuum. Rather, one should say that a continuum is composed of potential entities, with no independent being before division. In other words, things are continuous if they really make one (continuity is a property similar to homogeneity).

This is not to say that points do not exist in a line, a surface, or a body. Indeed, Chatton was vigorously opposed to Ockham's "non-entitism," according to which indivisibles do not exist at all (see Wood's introduction in Adam Wodeham 1988). For example, if one imagines a perfect sphere touching a perfect plane on one single point and then rolling on each and every point in that plane. These points of contact really exist, but are only potentially present in that plane and that sphere, not as separate entities. Now, could they exist separately?

First of all, like Aristotle and Epicurus, Chatton accepts the existence of limits in the physical division of a natural body. Division everywhere is not naturally possible, even though division is still possible, potentially, beyond these limits. Nevertheless, Chatton asserts that "potential" means that it is not contradictory with separate existence. In order to establish this point, Chatton adds some new arguments based on God's absolute power. God does not only cognize the precise number of indivisibles, as in Grosseteste's and Harclay's theories, but he can also, without contradiction, remove repeatedly the end-point from a line or add a new one, and this makes a different line, with a different quantity. Grosseteste and Harclay already accepted such symmetry between addition and division. But Chatton goes one step further: God can divide the continuum up to its ultimate parts, so that points would exist as separate entities. By this thought experiment, division everywhere becomes a real possibility, even though it never occurs naturally. Anyhow, with the paradoxes previously exposed, if a finite continuum were divided everywhere, the number of indivisibles would be finite. Therefore, it follows that *minima naturalia* are still divisible into a finite number of points.

Some years later, Gerard of Odo and William Crathorn criticized Chatton for having defined points as mere potential parts (de Boer 2009; Robert 2009). According to them, it implies a too restrictive definition of the continuum, since it does not allow two actual entities to form a new continuous entity. Indivisibles can well be actual parts of the continuum. First, their mereology assumes that a whole *W* is nothing but the sum of its parts. Second, they claim that if the parts of a continuous whole *W* are responsible for its existence, they must be real and actual parts, not only potential parts (the possibility of division implies that parts already have actual existence before division). Then, if *W* were infinitely divisible, it would result that the sum of its parts is an actual infinite. Consequently, *W* would have contradictory properties (it would be actually finite and actually infinite). Moreover, this would force the divisibilist to accept the existence of an actual infinite (a notion which is not accepted by Aristotle himself). Therefore, if the division of a continuum were to be achieved by some power—at least by God—the number of parts would be finite.

This conception of mereology allows them (and later John Wyclif) to form a new argument based on the metrical paradox of extension. If a whole *W* is nothing but the sum of its parts, the same is true for its place. The place occupied by *W* is nothing but the sum of the places occupied by its parts. Now, if you divide a table in two pieces, each piece will occupy half of the place of the table, and this is true for every further division. If *W* were infinitely divisible, from the division would result an infinite number of places, and this infinite sum of places, with a positive extension, should correspond to an infinite place, not to the finite place occupied by the table.

This position is far from being clear. Both Gerard of Odo and William Crathorn continue to talk about atomic parts as indivisible points, as if they defended a version of Plato's geometric atomism. But their arguments seem to imply a much more physical conception of the atoms: they are actual entities, occupying a particular position in space, and their number is limited. Crathorn even mentions the existence of "points of gold" and "points of lead," as if indivisibles had properties like *minima naturalia*. Anyhow, to be consistent, their solution to the metrical paradox of extension should attribute to indivisibles a minimal magnitude. Unfortunately, they never made clear whether they accept a distinction between physical atoms and mathematical indivisibles.

This adhesion to finitism has some important consequences on their conception of mathematics. Indeed, if the number of indivisibles is finite, how could one answer to the argument of the incommensurability of the diagonal and the side of a square? Avicenna and Al-Ghazali formulated the argument as follows: if one draws a parallel line from each point in one side of a square, each of them will cross the diagonal in exactly the same number of points, so that the diagonal and the side should be composed of exactly the same number of points. This argument, popularized by John Duns Scotus, threatens all kinds of indivisibilism, not only finitism. But all the finitists (Chatton, Odo, Crathorn, and Wyclif) answer this by saying that mathematical arguments only hold for abstract objects, not for physical lines, surfaces, and bodies. The real lines drawn on a sheet of paper are "tortuous" and cross the diagonal in several points, with angles. The diagonal does not have the same size as the side, and they are probably incommensurable (if the number of points is a prime number, for instance).

Later in the 1340s, Nicolas of Autrecourt and Nicolas Bonetus defended more entrenched positions. In his *Small Treatise on Quantity*, Nicolas Bonetus decided to support another theory, that of Democritus. As Bonetus defines it, Democritus' theory is partly in agreement with Aristotle, because the continuum is composed of parts that are themselves quantitative, and partly with Plato, since it is nonetheless ultimately composed of indivisibles. Democritus' atomism also differs from both of them, because atoms are not like mathematical points; they are indivisible bodies. Bonetus clearly states that Democritus' atoms are equivalent to the natural minima allowed by Aristotle's physics. They correspond to the limit of the physical division of a natural body, even though some division is still conceivable. Atoms are physically indivisible, but they have potential parts, which are also indivisible. Properly speaking, these mathematical indivisibles do not enter into the physical constitution of the thing. They are nothing but the terms, the end-points of a segment of a line. Thus, points are real entities, but they have no other existence than of a limit or extremity of a line, a surface, or a body. Bonetus concludes that division everywhere, if possible, would give rise to a limited number of atomic magnitudes, and therefore to a limited number of end-points.

At the same time, in his treatise called *Exigit Ordo*, Autrecourt made use of almost all the arguments for finitism mentioned earlier (Grellard 2004). Like Odo and Crathorn, he affirms that parts of the continuum are actual parts, because the concept of "division" is relational and it implies the pre-existence of the relata. Like Henry of Harclay and his followers, he defines the parts of a continuum by their position (*situalitas*) in space. As he puts it, compared with the whole continuum, points are not quantified, but in so far as they have a definite position and a proper mode of being, they are in some way quantified. So it seems clear that there are only a finite number of these atoms. Nevertheless, at the end of this discussion on indivisibles, Autrecourt asserts that if God divided the continuum eternally, he would probably arrive at an infinite number of indivisibles. This is probable, Autrecourt says, because of the apparent validity of mathematical arguments based on incommensurability. Autrecourt seems to assume this contradiction in the four conclusions he gives at the end of this part of the *Exigit Ordo*: (1) the continuum is not composed of parts which can be further divided; (2) a continuum is not composed of a finite number of indivisibles; (3) for every sensible or imaginable magnitude, there is a smaller one; (4) there is a magnitude such that a smaller one does not exist. It has been argued (Pyle 1995: 204–209) that

(3) only means that the senses and imagination cannot arrive at a real indivisible, whereas it really exists and is not cognizable by our finite mind. Conclusion (4) simply says that (3) is not true for every magnitude, because there are indivisibles that are the ultimate constituents of reality (1). The problem is therefore the acceptance of (3). Andrew Pyle and Christophe Grellard argue that Autrecourt defends a doctrine of the infinitesimal: the ultimate constituents of reality are indivisible, they have an extension > 0 , and they are infinite in number (even though the material bodies are only finitely divisible by a natural power).

Concluding Remarks

The first aim of medieval atomists was not to deliver a mechanical explanation of the natural world based on the motion of atoms in an infinite void space. Rather, they were looking for an acceptable description of the natural order and its creation, which would also give a rational account of the finitude of the Aristotelian cosmos as well as an objective system of measurement for magnitudes and material bodies. Of course, their acceptance of atomism had some consequences on their conception of physics. As an example, local motion can be described in terms of indivisible spaces traversed in a number of instants of time. Hence, atoms are in motion, but not without a body and not in a void space (Robert 2012). They also applied atomism to other types of motion, such as rarefaction and condensation, and more generally to qualitative variations, such as degrees of heat, for instance. Thus, it would be misleading to consider medieval atomism as a purely mathematical or geometrical theory, since it is also designed to give an account of physical phenomena.

What is striking in this theory is that even though they used discrete quantity in order to describe the continuum, medieval atomists were definitely continuists. Bodies, geometric figures, space, time, and motion are continuous. This seems to be a vain wish. For, as Aristotle puts it, two things form a continuum when their extremities are together, but indivisibles have no extremities, so that they cannot make a continuum. They cannot be in contact with each other, since, as Aristotle says in *Physics* VI, atoms would touch either whole to whole, or parts to whole, or parts to parts. As they do not have parts, they necessarily touch whole to whole, which means that they are superposed and do not create an increase in size (Murdoch 1964). From Henry of Harclay to John Wyclif, all the atomists employed the same strategy to answer this argument. Aristotle's claim is only true if we consider indivisibles or points that are in the same place. If one can distinguish their position (*situs*) in the continuum, it is not contradictory that points might be contiguous, without any point between them. Let us take, for instance, a point defined by the meeting of two perpendicular lines. If one of the two lines is moved from the left to the right, the point will be at different positions in the second line. This is true for both the divisibilists and the indivisibilists who accept the reality of points. It is therefore conceivable from a mathematical point of view that points have a definite position in space, so that they can be next to each other without any gap, and not superposed. In order to understand this claim, one has to move from sense experience to imagination, from physics to metaphysics. As we have seen, medieval atomists regularly ask the reader to imagine the physical world by assuming the view of God, whose power is only limited by the principle of non-contradiction.

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16

QUALITATIVE CHANGE

Robert Pasnau

At the boundaries of metaphysics and natural philosophy lies a fascinating medieval dispute over the way qualitative change takes place. Although modern philosophy has had little to say about this issue, anyone who needs properties or dispositions to do serious explanatory work should attend to how such qualitative features of reality intensify and diminish. For now, the most sophisticated such accounts are to be found in the later Middle Ages.

Motivating the Problem

A qualitative change is a change to quality, as opposed to a change to quantity or substance. The difference arises ultimately out of Aristotle's division of being in the *Categories*, which was widely understood to license a fundamental distinction between these different kinds of being. For present purposes, we can set aside the many controversies over the precise nature of the distinction between quality, quantity, and substance, and content ourselves with a few paradigmatic examples. When a thing becomes larger or heavier, or moves faster, it undergoes a change in *quantity*. When the thing itself—a dog, a tree, some water—goes out of existence, and is succeeded by something else, then there is a change in *substance*. When the thing endures, but becomes hotter, moister, or greener, it undergoes a change in *quality*. For scholastic Aristotelians, such qualities are in fact the fundamental causal agents in the natural world, completely overshadowing the peripheral role played by quantitative (geometric or kinetic) explanations. In keeping with this prominent physical role, for most scholastic authors, qualities also have a robust metaphysical status as *accidental forms* that are really distinct from the subjects (typically, the substances) in which they inhere.¹

In thinking about why the debate over qualitative change matters, we might start by imagining a theory of the world that makes no use of forms whatsoever: a view on which the only facts about the world worth keeping track of are facts about the location of particles in space over time. In such a context, problems of qualitative change can scarcely arise, because it is unproblematic to think of a particle's being located a little more in one direction or another, or moving a little more quickly or slowly. These are—at least on their face—strictly quantitative changes. Now suppose someone becomes dissatisfied with such a purely quantitative approach, and feels that it fails to give an adequate explanation of what is happening in the world. There are, of course, many reasons, which any Aristotelian can recite, for thinking that a wholly reductive account in terms of particles in motion must be supplemented by some sort of story about the forms of things. Let us not be distracted by those familiar reasons, but instead notice that the proponent of forms might at this point go in two rather different directions. One direction would treat forms as essentially epiphenomenal, by

which I mean that the forms would be a conceptual framework laid on top of some more reductive, mechanistic story. Explanatory appeals to form would be *necessary*, on this approach, but only insofar as we wanted to be able to come to grips with the underlying reductive story in a way that is reasonably simple and intelligible. The forms, so understood, would give us tractable *labels* for talking about the messy reductive level, but the real action would still take place at that lower level. The forms would not play any true causal role, and so might be dispensed with entirely in contexts where we were able to work directly at the complex level of particles in motion.

Contrast this with a picture on which forms enter directly and indispensably into our best scientific account of how the world is. Such a world will presumably include particles in motion, but will also include explanatory principles of a different sort, forms, which are not mere labels for other sorts of processes, but are themselves irreducible aspects of natural phenomena. One could not leave these forms out of the story, even in principle, without radically distorting the way nature works. Or, better, nature simply could not work without forms.

The problem of qualitative change might arise on either of these perspectives, but would do so in quite different ways. On the “epiphenomenalist” approach, the tendency of things to take on forms more and less intensely over time would be a necessary fact to account for, if our labeling is to track reality at all. Socrates is sometimes whiter and sometimes darker. This happens, indisputably, and we want to be able to put it in these terms, rather than have to dump our formal vocabulary and speak directly in terms of his surface particles absorbing and reemitting more and less light (as we would now tell the story). So conceived, the problem of the intension and remission of forms becomes a linguistic puzzle: what does it *mean* when we say that Socrates becomes whiter? Are we saying that he loses one shade of whiteness and gains another? Or are we saying that there is a change to the whiteness that he possesses? Inasmuch as this epiphenomenalist approach as I am imagining it really believes in forms, the question is not empty. But inasmuch as this approach holds that the real causal, scientific story occurs at a deeper level—a level so thoroughly quantitative that these issues do not arise—the question lacks a certain urgency. To put it another way, the question seems purely *philosophical*. What conception of form best accounts for how we want to think and talk about the situation? Our puzzle in fact looks strikingly similar to modern puzzles over vagueness. Just as we want a satisfactory account of how to talk about properties that have no precise cut-off points—say, when a thing ceases to be white and begins to be pale tan—so we want a satisfactory account of how to talk about any sort of qualitative change of properties. Does every such qualitative change mark the elimination of one property and the introduction of another, or can the same property endure through qualitative change? For the proponent of forms—or we might just call them properties—such questions ought to be seriously puzzling indeed.

Matters become much more serious, however, if we think that forms enter into our best scientific picture of the world. If we think that we cannot—on any level—explain Socrates’s becoming white without appeal to one or more forms of whiteness, then our problem is not a narrowly philosophical one, but a broadly scientific one. We would then face not just the question of how to analyze the way we naturally prefer to talk about change, but the question of how incremental changes can even happen in cases where the units of change do not appear to admit of increments. It is in this more serious guise that the problem appeared in the medieval context, inasmuch as these authors took the second of the aforementioned views—they were no epiphenomenalists. Questions over qualitative change thus become one of the foundational problems of scholastic natural philosophy, standing between a sustained Aristotelian metaphysics of form and a quantitative physics in the modern style. Because scholastic philosophers were able to form cogent accounts of how qualitative change might occur, amenable to quantitative precision, they were able to take some steps along the road to modern science. But because the issues always remained metaphysically obscure, and resistant to measurement, scholastic Aristotelianism was never able to provide a conducive environment for developing physics in a mathematical framework.²

Simple Views

As we look back at this material, we might ask ourselves whether the problems here are so serious that we ought to renounce forms altogether. In effect, this is how Galileo and other seventeenth-century proponents of the new science reacted to these issues.³ But we should hesitate before leaping to embrace this “modern” response. For, as I have suggested already, what goes for scholastic forms may well go for modern properties too. And whether or not we are Aristotelians, we ought to hesitate before giving up on the notion that things can undergo an incremental change to their properties. After all, there is no denying that things gradually do change their color. So we too should feel some pressure to find a plausible way to account for incremental qualitative change.

What, then, are the options? Looking over the range of historical solutions, there are two fundamental questions that serve to divide up the range of available solutions. First, there is the question of whether incremental qualitative change is to be explained in terms of a single enduring form or a series of numerically distinctive successive forms. Opting for succession, most prominently, were Godfrey of Fontaines and Walter Burley. For those who endorse a single enduring form, a second fundamental question arises: is the incremental change at issue intrinsic to the form itself or extrinsic? Those opting for an extrinsic solution included Thomas Aquinas and Giles of Rome. Those opting for an intrinsic solution included Henry of Ghent, John Duns Scotus, Thomas Wylton, and William Ockham.

As we will see, it is this last family of views that becomes most prominent in later scholastic discussions. But it took the debate a while to reach that point, because the thesis that qualitative change consists in intrinsic change to an enduring quality requires supposing that this quality somehow exhibits a complexity that allows it to endure through change. Yet, this flies in the face of a central assumption about the nature of forms: that forms are simple. One governing dictum here is the Aristotelian analogy: “forms are like numbers” (*Met.* VIII.3, 1043b32). The picture suggested is that—and this is another Aristotelian dictum—forms do not admit of more and less (*ibid.*: 1044a10). Just as a quantity either is or is not five, so a body either does or does not have a specific determinate shade of blue. You may have a little more than five things, or a little less—perhaps you can even have 4.999 things. But *being five* does not itself come in degrees, and the same holds for a determinate shade of blue, or for any quality. It is important to see that there are powerful reasons for wanting to insist on this all-or-nothing principle, beyond simply wanting to adhere to a few authoritative passages. For how *could* we think of forms as having parts? What sorts of parts might they have? What would unify those parts? Would the parts themselves have parts? Will it ever end? Reasonably enough, there was a strong prejudice in favor of the view that forms are the simple constituents of an Aristotelian metaphysics.

Yet if forms are simple, it would seem that they lack the sort of structure that admits of gradual change. How can a form vary, unless it is complex? Give parts to a form, and we can then allow those parts to change. If, in contrast, a form is simple, then any variation would seem to entail its becoming a different form. Hence, the proponents of the simplicity of form seem forced to explain qualitative change either in terms of the wholesale replacement of one quality by another, or in terms of a change to something other than the quality itself.

Views of this last kind are particularly prominent in the thirteenth century. One common thirteenth-century view—found in different ways in both Aquinas and Giles of Rome—holds that the very same unchanged quality can inhere more or less strongly in a given subject, and that differences within the subject determine the intensity with which the quality is possessed. Aquinas thinks that, at least for a wide class of qualities, this is the only possible solution, because “one instance of whiteness, considered in itself, is no more a whiteness than another” (*On the Cardinal Virtues*, 3c, in 2010). This is a tidy solution, in a certain way, but puts a great deal of weight on

what is involved in an accident's inhering in a subject. Inasmuch as no one had any very clear story to tell about that, this solution hardly counts as explaining much of anything. And it hardly helps when Aquinas speaks of a subject's *participating* more or less in a form, or when Giles talks of a form possessing greater or lesser *existence* in a subject. Given that both of these authors are inclined toward a highly deflationary conception of accidental forms, according to which a form's existencing is nothing more than a substance's existencing in a certain way, it is no surprise that they seek to explain qualitative change by focusing on the subject rather than on the form. Even so, their accounts seem simply to shift the locus of mystery from one place to another.⁴

A much more straightforward way to safeguard the simplicity of form, commonly ascribed to Godfrey of Fontaines, and later defended in considerable detail by Walter Burley, gives up on trying to explain how the same simple quality can make its subject more or less qualified. Instead, when Socrates becomes progressively more white, he takes on a series of ever-so-slightly different qualities, each one being whiteness of a slightly different determinate shade. This succession view has considerable appeal, because it avoids much of the metaphysical subtlety other views had required. There is no need to look for some kind of change within the subject, and no need to postulate that a quality can undergo intrinsic change, becoming more or less intense. What looks like change to a quality—Socrates's color—in fact is the replacement of one form with another along a latitude of similar qualities. To say that Socrates's color changes is not to say that one and the same color becomes more or less intensely white, but that Socrates loses his current color and acquires another. As an analogue to this line of thought, we might think of how some modern philosophers, when confronted with a substance's change over time, simply deny that a substance *can* change over time, and argue instead that what looks to be a single enduring substance is really a series of distinct, momentary stages, each one quickly replaced by another. Burley's conception of accidental form is just like this. The exterior of your house may seem to have a single accidental form—its color—day after day, but in fact as its color fades in the sun over the years, it is running through a series of forms.⁵

This looks, *prima facie*, like a promising solution to the problem of intension and remission. For while it seems on its face bizarre to think, as is today fashionable, that persisting *substances* are in fact a series of momentary substance stages, there is no such apparent bizarreness to the idea that seemingly persisting *accidents* are in fact sequences of temporary accident stages. After all, it is part of the very point of accidental forms that they are the sort of things that come and go while their subject remains. Burley's succession view simply postulates that such accidents come and go more often than one might have supposed. Given the sorts of examples we have considered—things changing their color—it cannot even be said that Burley's approach looks counterintuitive. For it would seem that we simply have no intuitions about whether a thing that slightly changes its color should be said to take on a *new* quality (a new accidental form), or should be said to undergo a modification in the character of the quality (form) it possesses. Given the difficulty of making sense of how an accidental form can undergo modification, it thus seems very natural to embrace succession, and say that all qualitative change, however slight, involves the loss of one accident and the gain of another.

Addition Views

On careful scrutiny, however, the succession view faces some very powerful objections. One such objection, pressed by Ockham, charges that, assuming qualitative change is continuous, the succession view is committed to an infinity of forms, coming and going, within any given time, in any case of qualitative change. Granted, no more than one of these forms would inhere in its subject at a given time, but still any qualitative change to an object—whether of heat, color, etc.—would require this sort of bloated ontology of entities, coming into and going out of existence.

This is a result that Burley frankly acknowledges as an implication of his account, remarking that “this is not absurd, but necessary.” Indeed, he argues that whenever we find successive entities (such as events) that endure through constant change, we should understand them to be composed of infinitely many instantaneous parts.⁶

Another kind of objection, which Wylton makes against Burley, is that the smallest of causes would be capable of producing the most dramatic of effects. Wylton’s example is that a single drop of water might extinguish the entire heat of the heavens. For it seems as if a single drop of cool water lowers the temperature of the heavens, even if very slightly. But if it cools the heavens, then the heavens no longer have the form they once had. Thus, absurdly, the entire heat of the heavens would be destroyed by a single drop of water. Burley’s response to this objection tries to downgrade the extent of the problem here. He denies that a single drop of water would change the temperature of the whole heavens, from east to west. And in that local area where there is a slight temperature drop, it is not as if the heavens would no longer be hot at all. But ultimately, Burley has to concede that a small agent can produce surprisingly large effects. In general, on the succession view, qualities are surprisingly fragile. Just as the slightest force may cause an antique vase to crumble, so too any change at all to the qualities of a thing destroys the form that was there and brings a new form onto the scene.⁷

Such fragility may not seem all that problematic in cases of color and temperature, but in the case of habits or dispositions, this looks to be extremely problematic. Habits are, after all, supposed to be characterized precisely by their stability. On the succession view, however, habits turn out to be every bit as fragile as sensible qualities. This leads to what is perhaps the most serious objection to the succession view, an objection first advanced by Scotus, who focuses specifically on the moral virtues. A virtue is supposed to be a quality that is acquired slowly, over a protracted period of time, as one’s virtuous activity steadily strengthens the virtue. On the succession view, however, nothing like this can be the case. On the contrary, acts of virtue literally destroy the virtue that gave rise to them, and cause that virtue to be replaced by a numerically distinct virtue. Burley has no choice other than to hug this monster, and insist that the stability of habits refers to the persistence of the broader kind of habit, even as individual instances change. A charitable person, then, will possess no single enduring habit of charity, but will stably possess one or another habit of a charitable kind, each of which will give rise to activities that, in turn, inculcate a new habit. This looks like a seriously counterintuitive result.⁸

If these arguments leave the succession view looking implausible, and if we do not want to shift the problem over to some sort of change within the subject of inherence, then it seems we need to find a way to allow the forms themselves to change intrinsically, becoming more or less intense without losing their identity. This strategy was attempted by Henry of Ghent, and then given its most influential formulation by Scotus. According to Scotus, we can distinguish between the accidental form itself, which has a certain fixed and unchanging “quiddity,” and the various “grades” or “modes” that the form can acquire or lose. This allows Scotus to agree with Aquinas that whiteness is never anything other than whiteness, unchangeably so. And Scotus can further account for why we think that a virtue like charity can stably increase over time, rather than constantly giving way to a distinct virtue. The price, of course, as usual with Scotus, is a highly speculative metaphysics that raises as many questions as it answers. The appeal to modes is supposed to be an improvement on the succession theory’s proliferation of distinct forms (and in this way, the account might seem to anticipate the seventeenth-century’s wholesale shift from accidents to modes). But, of course, there is still proliferation and distinctness here. Scotus thinks of these modes as “formal parts” of the accidental form, parts that somehow come together to make one thing. The more such formal parts there are, the more intense the accident is. But what unifies all these modes, and how many or few of them might there be, and could they exist apart from the form itself? The obscurity of all these questions is itself a considerable cost of the theory.⁹

A story along these general lines would be widely accepted by subsequent generations, but there is, of course, considerable debate over the details. On Thomas Wylton's view, which had a direct influence on Burley's formulation of the succession theory, the grades of a form are understood on the model of material rather than formal parts. So just as a material body can remain what it is even while gaining or losing material parts, so a form can remain what it is—whiteness, for instance, or charity—even while gaining or losing grades of intensity. William Ockham would later put pressure on Scotus's view along different lines, treating each of these grades as itself a real and distinct entity, separable in principle from every other grade, with each grade of charity itself being "altogether of the same character as the previous charity." Each of the parts of charity is thus itself fully an instance of charity.¹⁰

Within the already byzantine scheme of scholastic metaphysics, these debates are quite extraordinary, inasmuch as they open up the familiar framework of Aristotelian hylomorphism to a whole new level of composition. While one might have supposed that the basic principles of material objects are form and matter, it turns out that forms—at least accidental forms—are not simple at all, but themselves admit of further composition into their essence and their "formal" or "material" parts. These debates parallel questions that arise over whether substantial forms are simple or complex. Those discussions, however, are driven not by the prospect of incremental change, which was not supposed to occur at the level of substance, but by the need to account for the complexity of material substances. Hence, the debate over qualitative change remains its own distinct sphere of investigation, where the questions that arise are so desperately obscure that it is not even clear how the investigation is to be conducted. Still, one can see why the debate seems worth having, when one sees the inescapable need for some account of how qualitative change is possible.

Part of what makes all this so interesting is that these views open the door to the beginnings of a more quantitative natural philosophy. Medieval natural science was largely conducted in imprecise, non-quantitative terms, in part because no one had a reason to suppose that quantitative precision could be fruitful, and in part because it was unclear how to measure, and so give meaningful numerical values to, the sorts of qualities that were fundamental to the theory. But once these qualities are conceived of as themselves complex, and built up out of an aggregation of modes, then in principle those modes can be measured. Once that happens, qualitative theories can be formulated in quantitative terms. Indeed, the additive theory effectively seeks to treat qualitative change on the model of quantitative change, so that the story of how a substance changes its color or its disposition is structurally the same as the story of how it changes its shape or size—namely, in terms of adding and losing parts. Accordingly, fourteenth-century movements to put natural philosophy on a more quantitative basis—at Merton College, for instance, and at Paris, most prominently in the work of Nicole Oresme—gave prominent attention to these sorts of additive theories of qualitative change. In medicine too, the addition framework was seen as a bedrock conceptual tool in the effort to calibrate a patient's physiological state. In the words of the great sixteenth-century Italian physician Giambattista da Monte, "medicine is the science of all things in their latitude, from the first grade to the ultimate."¹¹

Going beyond this historical context, the problem of qualitative change should have enduring relevance to philosophers today, given that what goes for qualities would seem to go just as much for properties or for any modern analogue of modes or forms. More generally, the problem arises for any ontology that embraces the qualitative features of things and refuses to give a wholly reductive analysis of those things in terms of explicitly quantifiable magnitudes. To be sure, the Aristotelians were confronted with an especially virulent version of this problem, inasmuch as they wanted such qualities to play an ineliminable causal role in natural philosophy. But the problem is very real for anyone who believes in such familiar properties as whiteness or heat, or in behavioral dispositions such as virtues and vices. Modern philosophers have hardly paid attention to this issue at all. But the difficulties it raises are so fundamental that one might well consider

whether accidents and properties and habits and dispositions are perhaps more trouble than they are worth. If we have to treat them as constantly replaced in succession, or as having an intricate part-like structure, perhaps we would be better off getting rid of them entirely, by reducing them to some sort of wholly quantitative, micro-level account. Of course, we now know at least roughly how such a story would have to go. Heat becomes particles in motion, color becomes light waves, the virtues become neural networks. If such thoroughgoing reductionism sounds unappealing, then we need some answer to the problem of qualitative change.

Notes

- 1 For an overview of the Aristotelian metaphysics of substance and form, see Thomas Ward's contribution to this volume. For more details regarding later scholastic debates over the status of quantities and qualities and their relationship to substance, see Pasnau (2011).
- 2 Two of the fundamental modern scholarly discussions of the scholastic conception of qualitative change—Maier (1968) and Sylla (1972)—give particular attention to the way these issues lie at the foundation of scholastic natural science.
- 3 For a typical post-scholastic treatment of the degrees of quality, see Locke (1975), IV.2.11–13, who rehearses the sort of reductive quantitative story that might be told for color, but then observes that we have no way of determining what the precise relationship is between the quantitative reductive story and the observable qualitative story.
- 4 For Aquinas on qualitative change, see, e.g., *Summa Theologiae* 1a2ae 52.1c in (1947–1948). For Giles, see 1521, *Sent.* I.17.2.1. For a detailed survey of the debate as it runs from Aquinas to Scotus, see Solère (2012), which discusses in careful detail the range of views that explain qualitative change in terms of something external to the quality itself. On the inherence relationship between accidental forms and their subjects, see Pasnau (2011: ch. 11). On the sort of deflationary view of accidents that is common among thirteenth-century scholastics, see Pasnau (2011: ch. 10). For a clear indication of how Aquinas's deflationism informs his conception of qualitative change, see *Questions on the Virtues in General* (2010), 11c.
- 5 For a summary of Walter Burley's succession view, see Jung (2013). There has been considerable scholarly disagreement over how to understand Godfrey of Fontaines's earlier account, but recent opinion seems to have settled on the same verdict that Godfrey's contemporaries had reached: that he is a key forerunner of the succession view. See Celeyrette and Solère (2002) and Dumont (2009).
- 6 For Ockham's objection from an infinity of successive forms, see *Ordinatio* I.17.5 (in 1967–1989). For Burley, see his *Tractatus Secundus* (1496) ch. 6, f. 14va (a modern edition is underway by Elzbieta Jung). Neither of these works has been translated, but for a detailed discussion of this issue, see Adams (1987: 706–708). For the notion of a successive entity (in contrast to a permanent entity) to which Burley alludes here, see Pasnau (2011:ch. 18).
- 7 For Wylton's objection, see the second of his quodlibetal questions on intension and remission, an edition of which is forthcoming from Stephen Dumont. In work not yet published, Dumont establishes the connection between Wylton and Burley, and reports on Burley's response to Wylton, which appears in Burley's early and still unedited *Expositio super Physicam* V.62. I am indebted to Dumont for sharing this material with me. Indeed, the origins of this chapter lie in comments that I had the occasion to write for the Toronto Colloquium in Medieval Philosophy, where Dumont presented some of this material.
- 8 For Scotus's argument against the successive replacement of virtues by distinct virtues, see e.g. *Reportatio I-A*, dist. 17 pt. 2 q. 1 n. 80 (in 2004–2008). Ockham recites this argument approvingly at *Ordinatio* I.17.5 (in 1967–1989). For Burley's response, see his *Tractatus Secundus* (1496) ch. 6, f. 15r.
- 9 For Scotus's overall account, see Cross (1998: ch. 10), who also discusses in some detail Henry of Ghent's earlier and rather different view, which Scotus himself criticizes. Scotus develops his position in his various discussions of *Sentences*, book I, distinction 17—in his *Lectura*, *Ordinatio*, and *Parisian Lectures*. Only the last of these is presently available in translation, in (2004–2008).
- 10 For Ockham's insistence on the parts of a quality being themselves real and distinct from the other parts, see *Ordinatio* I.17.6 (in 1967–1989). That these parts are neither material nor formal, but rather of the same character (*ratio*) as all the other parts (see *ibid.*: q. 7). These discussions are not yet translated into English, but for a more detailed discussion, see Adams (1987: ch. 17).
- 11 Giambattista da Monte is quoted in Maclean (2002: 139), which discusses the broader context of the remark. For the Merton School, and its use of the addition theory to quantify a qualitative Aristotelian physics, see Sylla (1972) and also Murdoch (1969). For Oresme, see Kirschner (2000).

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PROOFS FOR GOD'S EXISTENCE

William E. Mann

Medieval philosophers bequeathed to posterity some of the most famous arguments in favor of the existence of God. In this essay, I will examine some of the members of two families of such arguments. Before introducing the families, however, we should consider some preliminary questions. Why did so many medieval philosophers think it important to prove God's existence? Who was the intended audience? What did the proofs disclose about the nature of God?

The importance of proofs. Some religious believers have claimed that God's existence is "self-evident," requiring no proof. Other believers claim that the only ways in which God's existence can be known are either through revelatory sacred texts or individual mystical experience. Thus, it would seem that proof is in all cases unnecessary. This conclusion follows, however, only if one assumes that the choice between self-evidence and revelation exhausts all the possibilities. By the time of the High Middle Ages, philosophical theologians rejected that assumption. They regarded an important part of their subject as a science, that is, an orderly, structured discipline whose task is to articulate what humans can know about God using only reason and experience of the natural world. This part of theology—*natural* theology—was distinct from what was alleged to be known only by means of revelation or mystical experience. And while most theologians conceded something to the notion of self-evidence in their conception of a science, the concession did not obviate the need for proof.

Other sciences could presuppose the existence of their subject matter without controversy. No one denies the existence of light and vision, the subject matter of optics, or of triangles, circles, and the like, studied by geometry. God's existence is not such a straightforward matter. Optics can tell us all about our perception of the visible world, but is appropriately silent about God's existence. Nor is it immediately obvious that God's existence can be proved in the way that one can prove that the square of the hypotenuse of a right triangle is equal to the sum of the squares of the sides. Theology's first order of business, then, is to establish that it has a legitimate subject matter, namely, God.

The audience. The fool of the Psalms who declares that there is no God (Psalms 14:1; 53:1) might be a fool, but even fools can have an influence over the beliefs of others. Anselm's argument, which we will examine first, explicitly addresses the fool, hoping thereby to undermine the fool's credibility by showing that theism is rationally superior to atheism. But he also hopes that his argument will help other believers to understand their belief more fully.

We will be primarily examining arguments presented by Christian philosophers. It is doubtful that these various existence proofs would have had much effect on converting non-Christian theists, if only for the simple reason that medieval Jewish and Islamic philosophers developed similar

proofs of their own. There was disagreement within and among these three faiths about the principles employed in the arguments, but the disagreement was mostly philosophical.¹

God's nature. Medieval philosophers also disagreed about what divine attributes were best suited to prove God's existence, though there was considerable general agreement about the attributes descriptive of God. God was thought of as omniscient, omnipotent, perfectly good, eternal, omnipresent, infinite, and spiritual; unique, necessarily existing, creator of and sovereign over everything else, in sum, a being than which nothing greater can be conceived.

Anselm's argument. Members of the first family of arguments have been called "ontological arguments." Their most distinctive common feature is that they purport to show that God's existence can be proved by reason alone. No empirical claims are premises of these arguments. No experience of the world is necessary; reason alone suffices. The most famous family member was presented by Anselm of Canterbury (1033–1109). In his *Proslogion*, Anselm fastened upon the phrase, "something than which nothing greater can be conceived," to demonstrate how reason could establish God's existence.

We believe you [Lord] to be something than which nothing greater could be conceived. Or is there then not something of such a nature, since the fool has said in his heart, "There is no God"? But surely this same fool, when he hears this very thing that I speak—"something than which nothing greater can be conceived"—understands that which he hears, and that which he understands is in his understanding, even if he does not understand it to exist . . . And surely that than which a greater cannot be conceived cannot be in the understanding alone. For if it is in the understanding alone, it can be conceived to exist in reality also, which is greater. Thus if that than which a greater cannot be conceived is in the understanding alone, then that than which a greater cannot be conceived itself is that than which a greater can be conceived. But surely this cannot be. Therefore without doubt something than which a greater cannot be conceived exists both in the understanding and in reality.²

Anselm begins by granting, provisionally, what the atheist must suppose. He then proceeds to argue that the atheist's suppositions lead to the very conclusion the atheist wants to deny. If successful, Anselm will have demonstrated that atheism is impossible, not merely mistaken. Anselm's atheist must suppose two things:

- (1) He [the atheist] understands the phrase, "the being than which nothing greater can be conceived."
- (2) The being than which nothing greater can be conceived does not exist in reality.

Why (1)? Because failure to understand the phrase would be a sign of deep linguistic incompetence, deep enough to prevent the coherent assertion of (2). And (2) is, of course, the standard-bearer of atheism.

To be successful, Anselm must show that despite appearances to the contrary, (1) and (2) conceal an inconsistency. Although his reasoning is compressed, it can be interpreted along these lines: let us begin by abbreviating "the being than which nothing greater can be conceived" with "the GCB." To understand "the GCB" is to understand that nothing can be greater than the GCB. Now if the GCB is conceived as existing only in the understanding, then *at least one* being greater than it can be conceived, namely, a being just like the one the atheist is conceiving, but which also exists in reality.³ Therefore, *either* the atheist is not really conceiving of the GCB, but of some inferior entity—Zeus or Odin, perhaps—or if he is really conceiving of the GCB he must acknowledge that the GCB exists in reality.⁴

It did not take long for Anselm's argument to receive criticism. Gaunilo, a monk from Marmoutier, wrote an essay in reply, and Anselm, in turn, replied to Gaunilo, instructing that henceforth all three works be published together. Although Gaunilo is not as careful as he might be, he raises one notable criticism that can be refined on his behalf. The criticism proceeds by constructing an argument parallel to Anselm's, but which has a false conclusion. Consider the phrase, "the island than which no greater island can be conceived" (the GCI). Gaunilo claims that Anselm's style of argument would "prove" that the GCI exists. For Anselm would want to assent to both (1') and (2'):

- (1') He [Anselm] understands the phrase, "the GCI."
- (2') The GCI does not exist in reality.

In order to understand "the GCI," Anselm must acknowledge that no island can be greater than the GCI. But if Anselm tries to claim that the GCI exists only in the understanding and not in reality, he will seemingly be hoist with his own petard. If the GCI exists only in the understanding, then a greater island than it can be conceived, namely, one just like it but also existing in reality. So either Anselm has not been conceiving of the GCI or he must concede that the GCI exists in reality.

While Anselm dismissed Gaunilo's counterexample, he did not provide satisfactory grounds for its dismissal. Anselm's argument, however, captured the attention of his successors, some of whom were supporters, while others were detractors. Chief among the detractors was Thomas Aquinas (1225–1274).

Aquinas's epistemological objection. In his *Summa Theologiae*, Aquinas argues that even if one grants to Anselm that the proposition that the GCB exists in reality is a self-evident truth, one is not thereby forced to acknowledge that the GCB exists in reality. Aquinas's position appears to be contradictory, but it is not. Aquinas distinguishes between two kinds of self-evidence, self-evidence in itself and self-evidence to us. Every self-evident proposition is self-evident in itself but some self-evident propositions are not self-evident to every person. (Some may not be self-evident to *any* person.) Aquinas's distinction can be illustrated by these examples. "Every triangle has three angles" is self-evident in itself *and* self-evident to anyone with rudimentary linguistic competence. In contrast, consider "No three integers, x, y, z , satisfy the equation, $x^n + y^n = z^n$ when $n > 2$." It is not clear whether Aquinas would have regarded this proposition—Fermat's Conjecture—as self-evident in itself. The proposition is necessarily true but unproven until 1995. Moreover, Aquinas would have to acknowledge that it would be self-evident to an omniscient God. In any case, it is not self-evident to every person; virtually, every person lacks the mathematical sophistication to see that it is necessarily true.

Return now to Aquinas's objection. Aquinas regards "God exists" as self-evident in itself, because God's essence is to exist. But because we do not fully understand God's essence, we are in the same epistemological position as those who do not fully understand enough about the essential interconnections among the infinitely many integers to intuit that Fermat's Conjecture is true. God's existence is not self-evident to us. By Aquinas's lights, then, Anselm's argument does not rule out atheism as an epistemologically defensible position.⁵

Anselm seems to have anticipated Aquinas's criticism. In *Proslogion* 4, titled "How the Fool Said in His Heart What Cannot Be Conceived," Anselm emphasizes that no one can fully *understand* what the GCB is. However, he believes, full understanding is not required for his argument to work. There is a world of difference between

- (3) You understand the phrase, "the GCB"
- and
- (4) You understand the GCB.

The truth of (3) does not require or presuppose the truth of (4).

Scotus's Amendment. John Duns Scotus (1266–1308) thought that there was a weak spot engendered by Anselm's argument that could be repaired by amending "the GCB." The weak spot is this: the more superlative attributes that are alleged to be essential to God's nature, the more likely it is that some of those attributes will conflict with others. Anselm, for example, had raised questions about how God can be omnipotent while also being unable to lie, or be supremely just yet merciful.⁶ Scotus is sensitive to this sort of potential conflict of attributes because he maintains that it is impossible to conceive of a contradiction. If that is so, and if analysis of "the GCB" reveals contradictory attributes, then "the GCB" can no more be conceived than "the greatest square circle." Barring some sort of special explanation, this consequence would prevent Anselm from beginning his argument. Scotus's repair is to amplify "the GCB" to the "being conceived without contradiction, who is so great that it would be a contradiction if a greater being could be conceived."⁷ Armed with this amplification and confronted with a pair of seemingly contradictory attributes, one can argue either that the pair is not really contradictory or that at least one of the attributes does not really apply to God.

It is doubtful that Anselm would have found comfort in Scotus's amendment, for it has Anselm putting the cart before the horse. Anselm *begins* his *Proslogion* with his proof; only after that does he seek to resolve conflicts among divine attributes. There is nothing untoward or question-begging about Anselm's method. Of course, he believes in God antecedently. He also believes that there is nothing like a proof to provide rational support for a belief initiated in faith. For Anselm as for many of his successors, an existence proof is the proper way for natural theology to begin. Once that proof is in place, one can begin the process of showing that the object of belief can be absolved of charges of contradiction.

Aquinas's metaphysical objection. Suppose, however, that Anselm would have granted Scotus's amendment. It still would not insulate Anselm's argument from criticism. Aquinas may have been the first to raise the criticism, although he puts it somewhat cryptically.

Let it be given that this name, "God," is understood by everyone as "something than which a greater cannot be conceived." It will not be necessary for something than which a greater cannot be conceived to exist in reality. For a thing is necessarily posited in the same way as an account of its name. Moreover, from [the fact that] what is expressed by the name, "God," is conceived by the mind, it does not follow that God exists solely in the understanding. Hence one is not obliged [to think] that that than which a greater cannot be conceived exists solely in the understanding. Yet from this it does not follow that there is in reality something than which a greater cannot be conceived. For, given that either in reality or in the understanding something can be greater, there is no difficulty for anyone, except for one who allows that there is something in reality than which a greater cannot be conceived.⁸

Aquinas's point seems to be that even if all of humankind were to agree with the description of God as "the greatest conceivable being," the description is inadequate to prove that God exists in reality. Why is that? Because the description may be defective in the same way that "the greatest positive integer" is defective: for any integer one can think of, there are integers greater than it. Similarly, there may be no conceivable being so great that a greater cannot exist or be conceived. To deny this possibility would be to beg the question—to presuppose what Anselm's argument sets out to prove.

Aquinas is not engaged here in the project of freeing the concept of God from contradictory attributes. He is rather sounding an alarm against even beginning Anselm's project. By initially identifying God as the being than which a greater cannot be conceived, Anselm risks erecting his theological edifice on a metaphysical fault line.⁹

Aquinas's approach. Aquinas's antipathy toward Anselm's argument is a consequence of a different conception of the way in which natural theology should proceed. Anselm proceeds in a way

reminiscent of what one would find in a textbook on geometry: begin with indubitable premises and deduce consequences with the aid of reason alone. Empirical evidence is irrelevant to Anselm's procedure. This is not so for Aquinas, who is explicit about his method. He points out that sometimes we reason from cause to effect, based on experience. Thus, our knowledge that fire burns leads us to avoid putting our hand on the burner. But in other cases, we argue from effect to cause. The broken window, the ball on the floor; the kids must have been playing baseball again. In this case, the effect is better known to me. I hypothesize the cause on the basis of the evidence. I could, of course, be wrong. The ball might have been on the floor for weeks. The window might have been broken by a large bird. Aquinas takes his arguments for God's existence to proceed from effect to cause. We are more familiar with some general features of the world than we are with God. But these features, Aquinas believes, when considered properly, lead us to acknowledge God's existence as the cause of their existence.¹⁰

The most visible source of Aquinas's arguments is article 3 of question 2 of the first part of his *Summa Theologiae*. In article 3, Aquinas presents "five ways" in which God's existence can be demonstrated by one's attending to different earthly phenomena.¹¹ Each "way" is a complex argument, presupposing in several cases a background of Aristotelian physics and metaphysics. Analysis of all of them would take us beyond the confines of this essay.¹² I shall concentrate on the first and fifth ways, because they more closely resemble arguments put forward in recent times.

The First Way

The first and most obvious way is based on motion. For it is certain and confirmed by the senses that some things are being moved in this world. But whatever is moved is moved by something else. For nothing is moved except in accordance with what it has the potentiality to be moved. Something moves, however, as it is in actuality, for to move is nothing other than to bring something from potentiality into actuality. But a thing cannot be brought from potentiality into actuality except by some being in actuality. For example, fire, which is hot in actuality, makes wood, which is hot in potentiality, also to be hot in actuality by moving and altering it. But it is not possible that the same thing be at the same time in actuality and in potentiality—not in the same respect, but only in a different respect. For what is hot in actuality cannot at the same time be hot in potentiality, though it is at the same time cold in potentiality. Thus it is impossible for something in motion to be in the same respect and in the same manner both mover and thing moved, or that it move itself. Thus it is necessary that whatever is moved is moved by something else. It follows that if this [other] mover is moved, it must be moved by something else, and this latter [mover] by something else again. This does not go on to infinity, because if that were so, nothing would be a first mover. As a consequence neither would there be other movers, because second movers do not move unless they are moved by a first mover. For example, a stick does not move [anything] unless it is moved by a hand. Therefore, we must arrive at something that is a first mover that is moved by nothing. And this everyone understands to be God.¹³

A few explanatory notes are in order before we proceed to examine the argument in detail. For an argument seemingly based on motion, it is odd to find fire burning wood used as an illustrative example. Aquinas's notion of *motus* covers, in addition to change of location, some other kinds of change, such as growth of an organism and alteration of a quality in a subject, for example, a leaf's turning from green to red. Thus for Aquinas, the burning of a log is as much a case of *motus* as a cue ball striking the eight ball.

In his somewhat earlier *Summa Contra Gentiles*, Aquinas gave pride of place to the same argument, noting that its success depends on proving two of its assumptions, namely, that whatever is

moved is moved by something else and that the sequence of movers and things moved cannot be infinitely long. In this earlier presentation, Aquinas offered three separate, intricate sub-proofs for each of the two assumptions. The sub-proofs cite Aristotle's *Physics* for their authority.¹⁴ By the time he wrote the *Summa Theologiae*, he had distilled the sub-proofs for the assumptions down to one apiece. It is plausible to assume that these were the sub-proofs he took to be the most convincing.

Whatever is moved is moved by something else. This assumption is equivalent to the proposition that nothing moves itself. At first, it seems obviously false: you sweep your eyes from left to right as you read this line; an acorn forgotten by a squirrel grows into an oak; the internal degradation of a leaf's chlorophyll accounts for its turning color. Second thoughts suggest, however, that these cases may not be counterexamples. What tugs in the opposite direction is the intellectual impulse to think that every change must have some cause or other distinct from the change itself. Aquinas's first assumption plays on that impulse.

The bulk of the first way is devoted to a campaign to establish the first assumption. The campaign begins by assimilating all cases of movement to cases of potentiality being actualized. Any particular thing will have a repertoire of potentialities. For example, in scanning a line of text, you actualize your potentiality to move your eyes in their sockets. (Owls lack this potentiality; they must instead swivel their heads to survey a landscape.) The campaign continues by claiming that

(5) Potentialities can only be actualized by something that is already actual.

(5) appears to be innocuous enough. However, Aquinas's example of the actual heat of fire transforming wood's potential heat into actual heat suggests that he has a principle in mind that is both more refined and more contentious. Let the variable letters x and y range over individuals, and let F range over properties. Then instead of (5), we have

(5') The potentiality in x to be F can only be actualized by something, y , that is already actually F .

As a general claim, (5') appears to be false. A coach can make a potential hurdler into an actual hurdler, even though the coach never ran hurdles.

The next stage of Aquinas's argument consists of the claim that nothing can be both potentially F and actually F at the same time. Because it is actually hot, boiling water can no longer be potentially hot, though it is now potentially cold. The purpose of this claim is to establish the thesis that

(6) If the actual F -ness of y actualizes x 's potential F -ness, then $y \neq x$.

That is, nothing can be self-actualizing.

The sequence of movers and things moved cannot be infinitely long. Let us begin a discussion of this assumption by calling attention to what may appear to be a contradiction in Aquinas's thought. Later in the *Summa Theologiae*, when Aquinas is discussing the nature of creation, he defends the position that the world has not existed forever but rather had a beginning. However, he also maintains that there is no evidence sufficient to demonstrate that the world began: an everlasting world is not impossible and for all that we can tell by empirical means, the world might have existed forever. That the world began by a creative act of God is an item of faith for Aquinas, accessible to us only by means of divine revelation.¹⁵ He thus is committed to the possibility that God could have created a world that had no beginning!¹⁶ In order to underscore that point, he acknowledges that there could have been infinitely long causal sequences, stretching backward in time with no beginning. His examples are that of a craftsman who wears out (infinitely) many hammers

throughout his career, and of the generation of children from parents. Although Genesis tells us that there were first parents, for Aquinas that is a matter of revelation, not necessity.¹⁷

These examples appear to contradict the assumption that causal sequences cannot be infinitely long. But Aquinas makes a distinction that we can begin to understand by looking at his illustrative examples. Aquinas allows that there could have been an infinite, beginningless sequence of hammers, with each hammer_{*n*} having been manufactured with the aid of predecessor hammer_{*n-1*}, just as there could have been an infinite sequence of parental generations in one's family tree. These two putative examples are examples of causal sequences that are ordered *per accidens*: whether they are finite or infinite in length is accidental to them. But Aquinas disallows an infinite regress of causes in the example that occurs near the end of his first way. A ball, we may suppose, is moved by a stick. The stick, in turn, is moved by the hand holding it. What moves the hand? Perhaps it was nudged by someone else. Aquinas's point is that this line of inquiry must terminate in something he calls a first or unmoved mover. This kind of causal sequence is ordered essentially or *per se*.

There are five differences between *per accidens* sequences and *per se* sequences.¹⁸ (A) *Per accidens* sequences are sequential in time. Each cause in a *per accidens* sequence is earlier than that cause's effect. In *per se* sequences, the causes are all simultaneous. (B) *Per se* sequences count as sequences because they are ordered hierarchically: higher causes in the sequence have more power, actuality, or perfection than lower members of the sequence. For example, the motion of a hand imparts motion to the cue stick striking the cue ball, converting the ball's potential motion into actual motion. (C) Because they are simultaneous, all the members of a *per se* sequence exist as long as the sequence exists. Continuing existence need not hold in the case of *per accidens* sequences. Hammer_{*n-1*} might have been destroyed before hammer_{*n*} was manufactured. One's great-grandparents may no longer be alive. (D) *Per se* causal relations are transitive. If a hand's motion causes the cue stick's motion and the cue stick's motion causes the cue ball's motion, then the hand's motion causes the cue ball's motion. *Per accidens* causal relations need not be transitive. One's grandparents bring about one's parents but do not bring about oneself. (E) Finally, because of their hierarchical nature, membership in a *per se* sequence requires diversity of kind. The cue stick is a kind of instrument that, in virtue of its rigidity, has the capacity to transfer its actual motion to the potentially moving cue ball. The cue stick is in motion, however, because of the motion of a hand, a kind of organ with significantly more capacities than the cue stick. The hand, in turn, is part of an even more complex kind, a person, whose intention, one may presume, is to sink some object ball on the table. In the case of *per accidens* sequences, there need be no diverse hierarchy of kind. There can be hammers and ancestors all the way back.

So it is charitable to suppose that when Aquinas claims that an infinite sequence of movers is impossible, he is disbaring only an infinitely long *per se* sequence. The notion of a *per se* sequence has considerable utility for Aquinas, because it entails that, unlike the earlier movers in a *per accidens* sequence that might have expired long ago, the first mover in a *per se* sequence, "which everyone understands to be God," still must exist and be active. But even if we acknowledge the differences between the two types of sequence, why should we agree with Aquinas's claim? It is not obvious that the differences are sufficient to guarantee essential finiteness to *per se* sequences. Aquinas's argument is that if there were an infinitely long *per se* sequence, nothing would be the first mover in the sequence, and so "neither would there be other movers, because second movers do not move unless they are moved by a first mover." The argument does not establish what it may seem to establish. Consider Aquinas's example:

HAND → STICK → BALL

In this sequence, **STICK** is a second (or intermediate) mover and **HAND** is a first mover. If **HAND** is removed from the sequence, it does not follow that **STICK** ceases to be a second

mover. All that is required in order for **STICK** to retain its status as a second mover is that there be some mover higher than it. And that higher mover need not be a prime mover. It is hard to see, then, how Aquinas has shown that a sequence of higher and higher movers can only be finite.

There is more that can be said in defense of Aquinas's views about *per se* sequences. These views will resurface as we consider the fifth way.

The Fifth Way

The fifth way is based on the directedness of things. For we see that some things devoid of cognitive capacity work for the sake of an end—natural bodies, obviously, because they appear always or for the most part to work in the same manner and to pursue that which is best. Thus it is clear that they arrive at an end not by chance but by design. But things not having cognitive capacity do not tend towards an end unless directed by something having cognitive capacity and intelligence, as an arrow from an archer. Therefore there is some intelligent being from whom every natural thing is set in order to an end, and this we call God.¹⁹

Imagine dividing the physical world into natural bodies and artifacts. In the Natural Bodies ledger, we would place the chemical elements, oceans, mountains, plants, and more. Arrows go in the Artifacts ledger. Though fabricated from natural bodies such as feathers, wood, and iron, arrows are a product of conscious design. Notice that the distinction between natural bodies and artifacts does not track the distinction between simpler things and more complex things. Artichokes are more complex than arrows; yet, artichokes count as natural bodies. It is not clear whether Aquinas would regard animals and humans as natural bodies. It seems odd to classify them as artifacts. What is unclear is whether Aquinas thinks that *all* natural bodies must lack cognitive capacity. Though it would be interesting to pursue the question further—for example, is the natural body/artifact distinction exhaustive?—the fifth way has a more radical message. It is that everything is an artifact, the universe as a whole and each element in it: artichokes and archers differ from arrows only in the proximate sources of their artifactuality.

The argument from design, which enjoyed its heyday in the first half of the nineteenth century, appealed to the complexity of living organisms to argue that they could not be natural bodies in the way that oceans and mountains are. Proponents of the argument from design argued persuasively that it is staggeringly improbable that matter could have been assembled by chance to form something as sophisticated and adaptive as an eagle's eye, let alone the eagle itself, or a human. Thus, they concluded, there must be an enormously wise and powerful artificer who designed and created these organic structures and organisms.²⁰

Whatever the merits of this argument, it is not Aquinas's. In ways that Aquinas could not have known, the fifth way lends itself to a more scientifically modern interpretation. Suppose that we take advantage of the advances in science since Aquinas's time and focus our interpretation of "natural bodies" on the chemical elements, not earth, water, air, and fire, but hydrogen, helium, and their confreres. They behave "always or for the most part in the same manner," that is, their behavior conforms to empirical regularities that appear to allow for no exceptions. The regularities relevant here are the values of the four forces fundamental in physics, namely, gravitational, electromagnetic, weak, and strong. For present purposes, all we need to know is that gravitational force is roughly 40 *orders of magnitude* weaker than the other three forces.²¹ Yet, holding the other forces constant, it is crucially important that gravity be as weak as it is.

The universe contains 98 naturally occurring elements. Soon after the Big Bang, at least 95 of them, the elements heavier than lithium, would have to be produced naturally by stellar nucleosynthesis. This process requires that stars, which begin as clouds of hydrogen atoms, be large and have a long life, in order for gravitational attraction among the atoms to have enough time to

build up sufficient pressure in the star's core to bring about nucleosynthesis. According to physicist Lee Smolin:

If the gravitational force were stronger by only a factor of ten, the lifetime of a typical star would decrease from about ten billion years to the order of ten million years. If its strength were increased by still another factor of ten . . . the lifetime of a star would shrink to ten thousand years.²²

Stars realize the alchemist's dream, transmuting baser elements into gold (also oxygen, calcium, iron, and more). But they take their time, measured in billions of years, time provided by gravity's weakness.

This is one example of a more general phenomenon, the "fine-tuning" of the universe's physical parameters. The parameters might have had many different values, but in the unlimitedly many scenarios in which the values differ, either no universe develops—for example, matter collapses back into a singularity shortly after the Big Bang—or matter/energy dissipates so quickly that none of the heavy elements can be formed. It is a tempting step to infer that fine-tuning requires a fine-tuner, a being of immense wisdom and power, "and this," as Aquinas puts it, "we call God."

It may come as no surprise that alternative inferences have been offered.²³ Many of them have in common the postulation of some sort of theoretical mechanism that allows for the existence of a *multiverse*, including many—perhaps infinitely many—distinct universes. We happen to inhabit a universe that supports our existence. But in an honest casino where millions of poker hands are being dealt, it would be a mistake for a recipient of a royal flush to infer providence, divine or otherwise.

New work for per se causes? Multiverse theories can thus be invoked as alternative accounts to the theist's account of fine-tuning. A persistent theist may wish, however, to object that multiverse theories simply raise anew the questions to which theists believe only a supernatural answer is adequate. We can distinguish two pairs of questions.

- (7) How can there be many universes?
- (8) Why are there, or should there be, many universes?

Many physicists attracted to a multiverse theory will claim that there must be a naturalistic answer to (7), even if the answer resists empirical testing. Many of the same physicists will regard (8) either as a way of rephrasing (7) or as a question it is not the business of physics to answer. Physicists will divide on the interpretation of "not the business of physics to answer." Latitudinarians allow that (8) might be the legitimate business of some discipline other than physics. Defenders of scientism insist that if (8) is not a paraphrase of (7), and thus answerable by scientific means, then it is an illegitimate question.²⁴

- (9) What is it about our universe that makes its behavior intelligible, explainable, and predictable?
- (10) Why does our universe continue to behave in a way that makes it intelligible, explainable, and predictable?

Physicists can answer (9) by citing the stability over time of the values of the physical parameters and the laws that describe their interactions. Question (10) demands an explanation, not for the values and laws themselves, but for their very stability. Defenders of scientism will regard (10) as on a par with (8)—unanswerable because illegitimate.

Theists might be excused for regarding this dismissal of (10) as leaving too much unaccounted for. They might urge that the sort of account they seek must be an account that shows how the physical sciences, which depend on law-like stability, are possible. Here, they might find some help from Aquinas's notion of *per se* causation. Recall that a *per se* causal sequence is hierarchical, contemporaneous, transitive, and finite in its membership. Let us see a terminal fragment of such a sequence. Question (10) asks for an explanation for discernible, universal patterns found in nature. The answer is provided by the existence of stable laws and parameters. When we ask for an explanation for why there are stable laws, a theist may respond that they are maintained, from moment to moment, by God's wisdom, power, and goodness: without that maintenance, there would be chaos. When we inquire into the cause of God's wisdom, power, and goodness, we may be told that that is just what it is to be God. For such a theist, the quest terminates here: no more ultimate explanation is necessary or possible.

Of course, skeptics can reasonably protest this theist's explanation and the apparatus upon which it is based. One can suspect, for example, that the invocation of *per se* causation, with the insistence that such causation be hierarchical and terminal, is tailor-made to assist in proving God's existence.

The dialectic has carried us a long way from the scientific naïveté of Aquinas's fifth way. Yet, the fifth way provides the scaffold upon which such modern arguments can be framed and examined.

Notes

- 1 The principal differences among the three religions lie in the areas of revealed theology, initially codified in the Hebrew Bible, the New Testament, and the Koran.
- 2 *Proslogion* 2 (1946), my translation. A readily available translation of the complete work is Anselm (1995).
- 3 Anselm is silent about the number and kinds of beings in reality that would be greater than the GCB if the GCB exists only in the understanding. For his purposes, all he needs is one example.
- 4 *Proslogion* 3 (1946), titled “That [God] Cannot Be Conceived Not to Exist,” supports this interpretation of *Proslogion* 2.
- 5 *Summa Theologiae* I, 2, 1 (1963).
- 6 *Proslogion* 7 and 9–11 (1946), respectively.
- 7 Scotus (1993: 73).
- 8 *Summa Contra Gentiles* I, 11 (1967), my translation.
- 9 Anselm’s argument continues to fascinate philosophers. For a recent discussion, see Davies (2004), Baker and Matthews (2010–2011), and Mann (2012–2013).
- 10 *Summa Theologiae*, I, 2, 2 (1963).
- 11 The first way takes as its point of departure physical change or alteration in subjects; the second emphasizes causal agency; the third distinguishes among contingent and necessary beings; the fourth lays stress on gradations of goodness; the fifth takes note of the world’s orderly structure.
- 12 For a book-length treatment, see Kenny (1969).
- 13 *Summa Theologiae* I, 2, 3 (1963), my translation.
- 14 *Summa Contra Gentiles* I, 13 (1967).
- 15 *Summa Theologiae* I, 46, 2 (1963).
- 16 The created world is temporal, proceeding successively from past to present to future. Aquinas (1963) maintains that God is eternal and that eternity is a mode of being that has no successiveness (see *Summa Theologiae* I, 10). Everlastingness is thus not the same as eternity. Whether the world had a beginning or not, it could have been created by an eternal being.
- 17 *Summa Theologiae* I, 46, 2, reply to objection 7 (1963).
- 18 For a helpful discussion see Cross (1999: 16–18).
- 19 *Summa Theologiae*, I, 2, 3 (1963).
- 20 For background, see Dawkins (1986: chs. 1–3).
- 21 Not 40 times weaker, but 10,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000,000 times weaker.
- 22 Smolin (1997: 39).
- 23 See Smolin (1997) and Greene (2011).
- 24 For an example of latitudinarianism, see Ruse (2010). For scientism vis-à-vis religion, see Dawkins (2006).

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PART IV

Psychology

SOUL, MIND, AND BODY

*Paul J. M. M. Bakker***Introduction**

One of the most salient and far-reaching differences between modern “philosophy of mind” and medieval “philosophical psychology” has to do with the relation between soul and mind. For Descartes and the vast majority of his early modern successors, there is no meaningful distinction between these two notions. “Soul” (*anima*) and “mind” (*mens*) are just two names by which we refer to one and the same “thinking thing” (*res cogitans*). The problem that was created by Descartes, and that has occupied philosophy of mind until today, is how to explain the relationship between this thinking thing, the immaterial and unextended mind, and the body, defined in terms of matter and extension (*res extensa*). In its modern, Cartesian form, the “mind-body problem” was unknown to medieval thinkers. For them, the notion of “soul” had a much broader meaning than that of “mind.” The soul is not merely a thinking thing, but the principle that accounts for the whole range of functions associated with life: nutrition, growth, reproduction, locomotion, sensation, imagination, memory, and thinking. Hence, soul is not specifically human: plants and non-human animals have souls as well, albeit less complex and less powerful ones. From the perspective of medieval philosophical psychology, the primary problem is not how to explain the relationship between mind and body, but rather how to explain the relationship between soul, as the “principle of life” in general, and mind (or intellect), as the “principle of thinking.”¹

The introduction of Aristotle’s book *On the Soul* (*De anima*) to the Latin West, in the mid-thirteenth century, made the question of the relationship between soul and mind a particularly pressing and delicate issue. Aristotle famously defines the soul as the “first actuality,” or the “substantial form,” of a potentially living, organic body (*DA* II.1, 412a27–28). In Aristotle’s metaphysics of hylomorphism, a “substantial form” is what primarily gives the most basic structure and unity to matter and, by doing so, makes a material substance exist as the specific kind of thing it is. Defining the soul as the “first actuality” or “substantial form” of a potentially living, organic body therefore amounts to saying that the soul is what primarily accounts for the organic structure and unity of a body, and what makes it capable of performing all its characteristic vital functions. From this perspective, it goes without saying that soul and body are inseparable (*DA* I.1, 413a3). But in the same book *On the Soul*, Aristotle describes the mind in terms that sit quite uneasily with his general hylomorphic account of the soul. On the one hand, he claims that the mind is a “part” of the soul—namely the part by which the soul thinks or, more accurately, the part of the soul by which a human being thinks (*DA* III.4, 429a10). But on the other hand, he suggests that the mind

is “an independent substance implanted within us” (I.4, 408b18–19); that it is not mixed with the body and that it makes no use of bodily organs (III.4, 429a25–26); and that the mind is capable of “separate existence” because thinking does not involve the body (I.1, 403a8–11). Aristotle himself thus confronted his medieval readers with the question of how to conceive the relationship between soul and mind, and their respective relationship with the body.²

Averroist Views: Siger of Brabant and John of Jandun

The first way to answer this question is to claim that soul and mind are indeed two distinct entities that somehow work together to produce acts of thinking. According to this view, the mind is not ontologically speaking a part of the soul and of the hylomorphic metaphysical make-up of an individual human being, but is united to the soul only operationally in the act of thinking. Among the best-known representatives of this—highly controversial—view are Siger of Brabant (d. 1282/84) and John of Jandun (d. 1328), who both took their cue from Aristotle’s influential Arabic commentator Averroes (d. 1198).³

Averroes proposes a challenging reading of Aristotle’s notoriously difficult chapters on the mind (*DA* III.4–5). In these chapters, Aristotle describes thinking, just like perception, in terms of a change: thinking brings about a specific kind of (non-physical) change in the knower. For Aristotle, this entails that the mind must somehow consist of two parts or aspects: one that is receptive of the change and another that actively produces it. The function of the former, generally called the “possible intellect,” is to be made identical with the object known (more accurately, with the object’s *form*), whereas the role of the latter, usually called the “agent intellect,” is to make objects actually known. Knowledge, on this view, consists in a “formal identification” between the possible intellect and the object made known by the agent intellect. Both parts of the mind must have certain properties so as to be able to perform their typical functions. With respect to the possible intellect, Aristotle claims that it must have no determinate nature of its own, besides that of being receptive of the forms of all possible objects, and hence that it can neither be mixed with the body nor operate through a bodily organ. In other words, the possible intellect must be separable from the body. Concerning the agent intellect, Aristotle offers a very sketchy and partly metaphorical description, calling it a light, separable, impassible, and unmixed.

The vast majority of Aristotle’s Greek and Arabic commentators understood the agent intellect to be a single, separately existing celestial substance, not a part of the individual human soul. The originality of Averroes lies in his claim that not only the agent intellect, but also the possible intellect (or the “material intellect” as he confusingly calls it) is totally separate from the body and not mixed with matter in any way. Given that for Averroes (as for most medieval Aristotelians) matter is what accounts for the differentiation of individuals within the same species, the possible intellect’s immateriality inevitably entails its supra-individuality, i.e. the idea that there is only *one* separately existing possible intellect for *all* individual human beings. In the act of thinking, individual knowers are united (“conjoined” in Averroes’s terms) with this unique intellect, thanks to their sense images. In Averroes’s view, sense images, stored in the imaginative faculty of the soul, thus ultimately account for the individuality of thinking as well as for its content (i.e. the fact that I am thinking of, e.g., ducks instead of dogs).⁴

Siger of Brabant was probably the first Latin philosopher to adopt Averroes’s reading of Aristotle’s statements on the agent and possible intellect. In one of his earlier works, his *Questions* on book III of Aristotle’s *On the Soul*, Siger argues that the soul of a human being is somehow “composed” of the sensitive soul, on the one hand, and the intellect, on the other. The sensitive soul is united substantially with the body as its single substantial form. In other words, the sensitive soul, and nothing but the sensitive soul, is what gives matter the typical structure and unity that makes it exist as a human body. The intellect, however, is a unique and eternal, separate substance

made of a receptive part (the possible intellect) and an active part (the agent intellect). This unique intellect is not the body's substantial form, but establishes an operational union with an individual human being. This union comes about when human individuals provide sense images to be used by the intellect in order to perform acts of thinking. Hence for Siger, just as for Averroes, the sense images ultimately account for the operational union between the unique supra-individual intellect and individual human knowers.⁵ In a later work, his treatise *On the Intellective Soul*, Siger abandons the idea that the operational union between individual knowers and the unique intellect is established by means of sense images. In this work, he is willing to call the intellect a "part" and even a "form" of the human body, not in the strict hylomorphic sense of a substantial form, but in the broader sense of an "internally operating agent" (*intrinsecum operans*). The intellect is understood as a separate substance that "informs" individual human knowers by performing cognitive operations in them.⁶

Siger's view of the intellect as a separate agent operating "internally" in human knowers occupies a central place in the writings of John of Jandun, the highly influential "Prince of the Averroists." According to Jandun, the intellect is not the human body's substantial form, i.e. it does not give being to the human body, but a separate substance that performs cognitive operations in a human body. In the act of thinking, the separate intellect establishes a union with the body, more accurately with the "cogitative power," the highest embodied faculty of the sensitive soul. In this broad sense of an internally operating agent, Jandun is willing to say that the intellect is a "form" of the cogitating human being. Just as Siger in his later work, Jandun thus considerably broadens the meaning of the notion of "form." Moreover, he uses the idea of a plurality of forms to account for the relationship between soul, mind, and body. According to Jandun, a human being possesses not one single form, but two "proper forms," i.e. two forms that specifically account for being human: the cogitative faculty of the sensitive soul and the intellect. Both are "forms" in different senses. The former is a substantial form in the strict hylomorphic sense, whereas the latter is a form united with the human body in the way a sailor is united with a ship. By extending the meaning of the notion of "form," and by accepting a plurality of forms in human beings, Siger and Jandun go as far as Averroists can go to include the mind in Aristotle's general hylomorphic definition of the soul as form of the body.⁷

Pluralist Views: Peter John Olivi and William of Ockham

For most medieval Aristotelians, the Averroist view of the mind as a supra-individual separate substance was unacceptable, not only for philosophical reasons, but also because it was officially condemned in 1270 and 1277.⁸ As an alternative, some argued that human beings are not hylomorphic compounds in the strict sense, i.e. substances composed of matter and one single substantial form. Rather, human beings are multi-layered entities composed of matter and a plurality of distinct formal principles. Two well-known defenders of such a pluralist view were Peter John Olivi (d. 1298) and William of Ockham (d. 1347).

In sharp contrast to Siger of Brabant and John of Jandun, Olivi is critical of the application of hylomorphism to the human intellective soul.⁹ More precisely, Olivi endorses Aristotle's view of the soul as the body's substantial form but he considers it unacceptable (both "contrary to reason" and "dangerous to the faith") to hold that the mind, the soul's "intellective and free part," is the substantial form of the body. To account for the distinction between soul and mind, and for their respective relationship with the body, Olivi postulates three essentially different "formal parts" within the human soul: a vegetative, a sensitive, and an intellective part. These formal parts of the soul are related to one another because they are united in the same "spiritual matter."¹⁰ Spiritual matter is what accounts for the constitution of a unified human soul, by holding its three parts together. The soul is therefore not a simple entity, but a composite comprising spiritual matter

and three formal parts. Even though the tripartite soul taken as a whole constitutes the substantial form of the human body, the intellective part of the soul taken as such must be separate from the body in order to perform its typical functions (universal cognition and free volition). In order to explain the link between the mind and the human body, Olivi ascribes a mediating role to the soul's sensitive part. On the one hand, the sensitive part of the soul constitutes the immediate substantial form of the body.¹¹ On the other hand, the sensitive and the intellective parts of the soul are immediately linked together. This twofold relation entails that the sensitive part of the soul mediates between, and ties together, the body (with which it is united in a hylomorphic way) and the intellective soul. In Olivi's own words:

By the very fact that the intellective part [of the soul] and the body are said to be united with and inclined towards the sensitive part [of the soul], they are also held to be inclined towards and united with one another . . . And in this way it is true that their [i.e., the intellective part and the body] union is intimate; nevertheless it is not immediate, since it is with the sensitive part mediating that they are inclined towards each other and are united with each other.¹²

Olivi carefully avoids speaking of a plurality of souls in a human being. In his view, human beings possess only one soul composed of distinct formal constituents ("formal parts") having diverse relationships with the body. A few decades later, William of Ockham would go one important step further by arguing that human beings differ from plants and non-human animals by the fact that they possess two really distinct souls, a sensitive soul and an intellective soul. Both souls have the ontological status of a substantial form.¹³ Ockham's most powerful argument in favor of a real distinction between these two souls draws on the empirical observation that one and the same human being sometimes experiences mutually exclusive desires at the same time, one by sensitive appetite and the other by intellective appetite. The argument runs as follows:

It is impossible that contraries should exist simultaneously in the same subject. But an act of desiring something and an act of spurning that same thing are contraries in the same subject. Therefore, if they exist simultaneously in reality, they do not exist in the same subject. But it is manifest that they exist simultaneously in a human being, since a human being spurns by his intellective appetite the very same thing that he desires by his sentient appetite.¹⁴

Ontologically speaking, the crucial difference between the sensitive soul and the intellective soul is that the former is material and extended along with the extension of the body, whereas the latter is immaterial and indivisible (in Ockham's terms: "present as a whole in the whole body and in every part of it"). The intellective soul consists of two powers: intellect and will. These powers only differ from one another from the point of view of their respective acts. Acts of cognizing are really distinct from acts of willing (I can cognize *P* without willing it), but the principle that causes these acts is really one and the same, namely the intellective soul, which performs both acts on its own without using any bodily organ.

In contrast to the intellective soul, the sensitive soul (which accounts for all vegetative and sensitive functions of a human being) is divisible into parts that operate on different parts of the body. For example, the part of the sensitive soul that operates on the eye is called the "power of vision." Another part of the sensitive soul that commands the ear is called the "power of hearing." According to Ockham, these parts of the soul are homogenous. In other words, the distinction between the power of vision and the power of hearing does not derive from the sensitive soul itself, but finds its origin precisely in the relation between the sensitive soul and the various parts of the body. Nevertheless, Ockham claims that the distinction between the powers of the sensitive soul is real, for the simple reason that one can cease to function while others remain undamaged.

Applying this principle, Ockham even goes so far as to admit that human beings possess two really distinct powers of vision, namely one for each eye. But this real distinction between the parts of the sensitive soul is entirely dependent on the organic structure of the body, not on the sensitive soul as such. Hence, the organic structure of the body determines which acts are caused by a specific part of the sensitive soul.

Ockham's pluralist view ultimately amounts to a rather strong form of dualism between the sensitive soul and the intellective soul (or the mind). The former is made largely dependent on the organic structure of the body, whereas the latter operates independently from the body and its organs. This dualist view makes it difficult to explain how the sensitive soul and the intellective soul interact and how human beings act as unified living organisms.

Unitarian Views: Thomas Aquinas and John Buridan

According to their opponents, pluralists such as Olivi and (a fortiori) Ockham are unable to account for the unity of a human being. Thomas Aquinas (d. 1274), one of the most outspoken thirteenth-century adversaries of pluralist views of soul, mind, and body, argues as follows. A substantial form is the principle on which the existence, structure, and unity of a material substance primarily depend. Hence, if a material substance were composed of a plurality of substantial forms, it would not be a real unity, but rather an aggregate of distinct things. Applying this argument to human beings, he concludes:

Therefore if a human being were to be living through one form [the vegetative soul], an animal through another [the sensory soul], and human through a third [the rational soul], then it would follow that a human being would not be one thing unconditionally (*unum simpliciter*).¹⁵

Aquinas thus commits himself to a strictly unitarian, hylomorphic view according to which human beings are composed of matter and one single substantial form: the intellective soul. In his view, the intellective soul is the first operative principle of all vital functions human beings perform, from the most material and corporeal ones to the most immaterial and spiritual ones. Human beings possess no other substantial forms besides the intellective soul. Hence, the body has no substantial form of its own (a "form of corporeity"), but owes its being, unity, (organic) structure, and functioning entirely to the intellective soul. For Aquinas, and for other unitarians such as John Buridan (died. c. 1361), the question then is how to deal with Aristotle's claims about the mind being separable, immaterial, and unmixed.

In Aquinas's view, the solution to this question lies in postulating a distinction between the soul itself (or the "essence of the soul") and the soul's powers or faculties. Aquinas's main argument in favor of such a distinction is based on the assumption that the soul, according to its essence, is what accounts for the fact that a human being (or any other living organism) is always actually alive, from birth to death. The soul's powers or faculties, however, are not always actualized, at least not all of them. For example, human beings are not continuously engaged in acts of thinking or writing poetry. According to Aquinas, this implies that the soul's essence and the soul's powers are not fully identical. If this is indeed the case, then the question arises what kind of entities powers of the soul are. Aquinas suggests two possible ways of answering this question. In one sense, thinking along the lines of Aristotle's *Categories*, he claims that powers of the soul are "accidents" of the soul belonging to the ontological category of quality. But following Aristotle's discussion of the so-called five predicables in the *Topics*, Aquinas argues that the powers are not accidents, but "proper attributes" (*propria*) of the soul. Aristotle's example of a proper attribute is a human being's ability to learn grammar: this ability is not part of the essence and of the definition of being human, but it is necessarily consequent upon it. Hence, saying that the soul's powers are proper attributes of the

soul implies that they are not included in the soul's essence, yet are inseparable from it.¹⁶ Aquinas describes this intimate relation in terms of an emanation: all powers of the soul naturally emanate ("flow forth") from the soul's essence.

But even though all powers emanate from the soul's essence, they do not all have the same "subject" or substratum. The soul's vegetative and sensitive powers obviously require specific bodily organs to perform their operations. Hence, these powers have the whole human composite, soul and body together, as their substratum. However, the soul's intellective powers, intellect and will, do not require bodily organs to carry out their operations: it is the soul itself that performs acts of understanding and willing. Hence, these powers have the soul's essence as their substratum, not the composite of soul and body. In Aquinas's view, the soul's ability to perform acts of understanding and willing without using bodily organs is ultimately explained by the general metaphysical principle according to which forms possess an excess of causal power beyond the potential of their substratum. This principle can be observed at all levels of nature, as the following passage makes clear:

It is important to consider, however, that to the extent a form is loftier, to that extent it is more dominant over corporeal matter, less immersed in it, and more surpasses it in its operation or power. For this reason we see that the form of a mixed body has an operation that is not caused by the elemental qualities. And the farther we go in loftiness among forms, the more we find that the power of the form surpasses the elemental matter: the vegetative soul beyond the form of metal, and the sensory soul beyond the vegetative soul. But the human soul is the ultimate in loftiness among forms. Thus its power so surpasses corporeal matter that it has an operation and power that it in no respect shares with corporeal matter. And this power is called the intellect.¹⁷

Aquinas thus deals with Aristotle's claims about the mind being separable, immaterial, and unmixed by describing the mind as the only power of the soul able to act without using bodily organs. In his view, the mind is neither a separate substance (as the Averroists claim) nor a separate formal part of the composite soul (as Olivi argues), let alone a distinct soul in its own right (as Ockham claims), but a distinct power or faculty of the intellective soul, a human being's single substantial form. The ability of this power to perform acts of understanding and willing without using bodily organs is ultimately explained, on the one hand, in terms of a hierarchy of natural forms and, on the other, by means of the general metaphysical principle according to which forms possess causal powers that surpass the potential of their substratum.

Another rigorous defender of a unitarian view of soul, mind, and body is the fourteenth-century philosopher John Buridan.¹⁸ Buridan argues, just as Aquinas, that human beings have only one substantial form, the intellective soul. But while for Aquinas the human intellective soul occupies a position at the top of the hierarchy of natural forms, Buridan goes one important step further by arguing that the human soul transcends the domain of the natural and inheres in the body in a supernatural way. As a consequence, only faith and theology are able to provide knowledge about the soul's essence and essential properties. All natural philosophy can do is study the soul in relation to, and by means of, the body. Moreover, since the intellective soul is the first operative principle of all vital functions of a human being, Buridan argues that not only the intellective functions of a human being, but also the vegetative and sensitive functions belong to the realm of the supernatural. Hence in his view, vegetative and sensitive operations in human beings differ fundamentally from similar operations in non-human animals and plants.

Buridan also deviates from Aquinas with respect to the powers of the soul.¹⁹ In Aquinas's view, all powers of the soul naturally emanate from the soul's essence, even though the vegetative and

sensitive powers have the whole human composite as their substratum, while the intellective powers inhere in the soul's essence. Buridan, however, has a more parsimonious view. His account is based upon a distinction between a narrow and a broad understanding of the notion "power of the soul." Taken in a narrow sense, the notion "power of the soul" refers to what Buridan calls the soul's "principal" powers. In this sense, the notion stands precisely for the powers of the soul, leaving aside the bodily dispositions necessary for these powers to act. In a broader sense, the notion "power of the soul" refers to what Buridan labels the soul's "instrumental" powers. In the second sense, the notion "power of the soul" denotes either the powers of the soul together with anything needed for these powers to operate, in particular the organic dispositions of the body, or these bodily dispositions themselves.

The distinction between a narrow and a broad understanding of the notion "power of the soul" allows Buridan to make two apparently contradictory claims. On the one hand, he argues that the principal powers of the soul are really identical with the soul itself. Speaking of "principal" powers, we can only attribute multiple powers to the human soul in the sense that the soul is able to perform a variety of acts. According to this variety of acts, we use different words to describe the soul as vegetative, sensitive, or intellective. But these different words do not imply the real existence of vegetative, sensitive, or intellective powers distinct from one another and/or from the soul itself. On the contrary, it is the soul itself that "principally" performs all its acts, no matter how different they are. However, with respect to the soul's "instrumental" powers, Buridan argues that the powers are really distinct both from one another and from the soul itself. But the contradiction between these two claims is only apparent, because the principal powers are powers of the soul, whereas the instrumental powers are powers of soul and body together or, in other words, powers of the animated body. The latter are called "powers of the soul" only because the soul uses them as instruments. Insofar as these instrumental powers are bodily powers, they are really distinct from one another and from the soul itself. For example, the instrumental power of nutrition is distinct from the instrumental power of vision because the respective bodily (organic) dispositions required for nutrition and vision are really distinct. And precisely the same goes for the intellective power (qua instrumental power of the soul), which differs from the power of vision because the latter needs a specific bodily organ to act (the eye), whereas the former operates without any bodily organ at all.

Hence, on Buridan's account, all principle powers of the human soul are immaterial, indivisible, and immortal, precisely because they are really identical with the intellective soul, the single substantial form of a human being. Only at the level of instrumental powers, it makes sense to differentiate between vegetative and sensitive powers, on the one hand, and intellective powers, on the other. However, instrumental powers are not just powers of the soul, but powers of soul and body together.

Conclusion

Against the background of Aristotle's definition of the soul as the body's substantial form and his puzzling remarks about the mind being separable, immaterial, and unmixed, medieval Aristotelians developed various accounts of the relationship between soul, mind, and body. Given that Aristotle describes the mind as a "part" of the soul (*DA* III.4, 429a10), they all tried, in one way or another, to include the mind in Aristotle's general hylomorphic framework of the soul-body relation. One of the ways to achieve this goal was to elaborate, with different degrees of creativity, on the notion of "form." For example, Siger of Brabant and John of Jandun were both willing to call the mind (or the intellect) a "form" of the body, not in the hylomorphic sense of a substantial form, but in the broader sense of a separate agent operating "internally" in the (body of the) knower. Alternatively, Peter John Olivi described the soul as composed of three

essentially different “formal parts” (the vegetative, sensitive, and intellective) united in the same “spiritual matter.” He argued that the sensitive part of the soul ties together the body (of which it is the substantial form) and the intellective part of the soul (with which it is united in a different, non-hylomorphic way). Finally, Thomas Aquinas, who subscribed to a strict hylomorphic view of a human being as composed of matter and one single substantial form, considered forms to possess an excess of causal power beyond the potential of their substratum. This principle makes it possible for him to understand the mind as part of the intellective soul while allowing it to function without using any bodily organ.

Another striking feature of the medieval discussion about soul, mind, and body is the emergence of different types of dualism within an Aristotelian framework. This tendency can be observed in William of Ockham’s account of the radical distinction between the material and extended sensitive soul, closely linked to the organic structure of the body, and the largely independent, immaterial, and indivisible intellective soul. But the clearest witness to this nascent dualism is John Buridan. In Buridan’s view, human beings possess one single substantial form, the intellective soul, whose essential nature transcends the boundaries of natural philosophy. Only faith and theology are able to provide essential knowledge about the soul and its supernatural inherence in the body. In Buridan’s account of the (instrumental) powers of the soul, the intellective powers are considered to function independently from the body and its organs, just as Thomas Aquinas had argued. However, the vegetative and sensitive powers are so strongly tied to the body and its organic structure that they are no longer considered to be powers of the soul, but powers of soul and body together, or powers of the living body. Buridan thus makes an important step in the direction of a distinction between a material, extended (organic) body and an immaterial, immortal (intellective) soul—a step Descartes would certainly have approved.

Notes

- 1 For this difference between medieval philosophical psychology and modern philosophy of mind, see Pasnau (2007) and King (2007).
- 2 For a more extensive list of “Aristotelian *aporiae*” concerning soul and mind, see Bazán (2005: 594–595).
- 3 Averroes’s view of the intellect was particularly influential at Italian universities (especially in Bologna and Padua) between the fourteenth and the sixteenth centuries. See Kuksewicz (1965) and Hasse (2007).
- 4 For a clear and brief account of Averroes’s views of the intellect, see Black (2010).
- 5 For Siger’s early account of the intellect in his *Quaestiones super tertium De anima* (written c. 1265), see Bazán (2005: 603–613). As Bazán rightly points out, Siger’s view of the possible and agent intellects as “parts” of the unique separate intellect differs from the position of Averroes, who claimed that the agent and possible intellects were two distinct separate substances.
- 6 For Siger’s later account of the intellect in his *De anima intellectiva* (written in the early 1270s), see Bazán (2005: 613–617). Siger’s change of mind concerning the role of the sense images in individualizing thought was to a large extent due to Thomas Aquinas’s criticism. In his *On the Unity of the Intellect*, Aquinas famously argues that we cannot attribute the act of thinking to a specific human being simply because she provides sense images to the unique intellect.
- 7 For Jandun’s view of soul and mind, see Brenet (2003: 72–84, 2009). The analogy between the soul-body relation and the sailor-ship relation finds its origin in Aristotle’s *De Anima* I.2, 413a7–9.
- 8 One of the propositions condemned in 1270 states “that there is numerically one and the same intellect for all humans.” Similar statements were condemned in 1277. On the condemnations of 1270 and 1277 in general, see Wippel (1977).
- 9 For Olivi’s view on soul and mind, see Jansen (1934) and Pasnau (1997).
- 10 The notion of “spiritual matter” is derived from a view known as “universal hylomorphism,” i.e. the idea that all beings with the only exception of God are composed of matter and form. In the case of immaterial beings such as “angels” and the soul, this matter has to be of a spiritual nature. This “universal hylomorphism” finds its origin in the work *The Fountain of Life (Fons vitae)* of the Jewish philosopher Solomon Ibn Gabirol (also known as Avicenna) (d. 1057/8).

- 11 In Olivi's view, the human body itself is a composite entity as well. It is composed of matter and a substantial "form of corporeity." Hence in his view, human beings are composed of matter and two really distinct substantial forms, the form of corporeity and the tripartite soul. The form of corporeity brings about the characteristic physical structure and unity of a human body. The (sensitive part of the) soul accounts for the fact that this physically structured body carries out its characteristic vital functions.
- 12 Peter John Olivi, *Sent.* II, q. 59. For the English translation, see Duba (2012: 178–179).
- 13 Just like Olivi, Ockham argues that the human body has a substantial form of its own, the "form of corporeity." Hence in his view, human beings are composed of matter and three really distinct substantial forms: the form of corporeity, a sensitive soul, and an intellective soul. For Ockham's view of soul, mind, and body, see Perler (2010).
- 14 Ockham, *Quodlibet* II, q. 10. For the English translation, see Ockham (1991: 132–133).
- 15 Aquinas, *Summa theologiae*, I, q. 76, a. 3. For the English translation, see Pasnau (2002: 31).
- 16 Following the *Categories*, everything that exists must be either substance or accident. Given that the soul itself, as a substantial form, belongs to the category of substance, the soul's powers can only be accidents. Aquinas argues more specifically that the powers belong to the "second species of the category of quality," i.e. they are "natural capacities" for doing or undergoing something easily (cf. Aristotle, *Cat.* 9a14–19).
- 17 Aquinas, *Summa theologiae*, I, q. 76, a. 1. For the English translation, see Pasnau (2002: 23). The "form of metal" is a reference to magnets, whose magnetic power is not caused by the qualities of the composing elements.
- 18 For Buridan's view of soul, mind, and body, see Zupko (1997), and De Boer (2013: 219–224, 288–298).
- 19 For Buridan's view of the powers of the soul, and its background, see De Boer (2013: 241–248) and Bakker (2019).

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19

INTELLECT

Jack Zupko

The Latin term “*intellectus*” has a three-fold meaning that is lost in its usual translation as the English substantive noun, “intellect.” First and foremost, any Latin speaker would realize that the term “*intellectus*” is the past, passive participle of the verb “*intelligere*,” meaning to understand, or grasp something with the mind. As such, the term in the first instance may have brought to mind the act or activity of understanding, as opposed to a static quality or state in some subject. As a past, passive participle, “*intellectus*” literally means “that which has been understood,” and so it could connote as well the object or termination of the act of understanding. Finally, “*intellectus*” also refers to the faculty or power of understanding, which is what we usually think of when we use the English term “intellect.” According to the *Oxford Latin Dictionary*, this is only the third most frequent use of the term in the literary remains of Roman antiquity; it is surpassed by the senses, which connote activity.

Of course, medieval thinkers from Augustine in the fourth century to Peter of Ailly in the fifteenth used “*intellectus*” in all of the senses outlined earlier, including to mean what we would now call the faculty of intellect. The key point to remember is that regardless of how it is translated, the ambiguity remains in the Latin use of the term; indeed, William of Ockham (c. 1287–1347) clearly plays on this ambiguity to offer a more parsimonious account of mental activity, in which the object of understanding is not some particular image or idea, but simply the intellectual act itself.

Two Paradigms

At the end of Greek and Roman antiquity, there were two competing paradigms or models on the nature of the intellect, both of which were transmitted to medieval posterity (though often indirectly, and in ways that departed from their authors’ original intent).

The first is the broadly Platonic notion that each of us is essentially an intellect, or in Plato’s philosophy, an immaterial soul that is always active and engaged with its objects: immaterial forms which are universal and unchangeable. Because of its “imprisonment” in the body (*Phaedo* 82b–85d), the soul is initially confused into thinking that the things we sense are its real and proper objects. But philosophical enlightenment reveals that sense objects are fleeting and false, a realization that frees the soul to return to its true home among the forms, which it “thinks” eternally. The intellectual activity of understanding or thinking is thus the end of a moral journey of self-realization, the fulfillment of our true nature. There is also the idea that our nature is unitary: all mental acts are intellectual acts, thoughts directed toward the same indivisible object.

The second is the broadly Aristotelian notion that the intellect is a proper part of something metaphysically more fundamental, i.e. a substance, which has other parts as well. According to Aristotle, “intellect” refers to “the part of the soul with which the soul knows” (*DA* III.4, 429a10), or, in the first Latin translations of this text, to the part of us that “thinks and understands [*cognoscit et intelligit*].” The thinking part of the soul is differentiated vis-à-vis two other parts: the vegetative part, which governs the nutrition and growth of an organism, and the sensitive part, with which the organism sees, hears, smells, tastes, and feels, as well as imagines and remembers (Aristotle also mentions desire and movement as parts of the soul, though they do not receive the same systematic treatment as the other parts). Together, these parts constitute the soul, or “life principle” of a human being, i.e. the collection of activities that make it the kind of animal it is.

Aristotle arrives at this picture of intellect by studying its function. For him, the intellect’s characteristic activity of understanding or thinking calls for a further distinction between its active and passive moments. These correspond, on the one hand, to the intellect’s capacity to “make” or “illuminate” all things, and, on the other, to its capacity to “become” all things (*DA* III.5). These are metaphors, of course, and their precise meaning has always been controversial, but the basic idea is that in cognition, the form of something is received without its matter—unlike physical change, in which both form and matter are received (e.g. the wall becomes white when we apply white paint to it). When we think of an object, the intellect accesses the nature of that object, but without bringing on board any of the physical “stuff” that belongs to its constitution outside our soul or mind.

These two paradigms—one Platonic and the other Aristotelian—were transmitted, and transmuted, through a wide variety of medieval philosophical writings. But there was an element of happenstance in the way they influenced medieval authors because of the availability of source texts, or (rather) the lack thereof. Thus, all of Plato’s writings except for the first half of the *Timaeus* were lost until the Renaissance because they were not translated into Latin and no one in the West could read them. So the Platonic paradigm had to enter Western medieval philosophy indirectly, through a late antique author deeply influenced by Platonism, Augustine of Hippo (354–430), whom everybody read because his teachings were foundational for Christian doctrine. The situation with Aristotle was only slightly better. His treatise *On the Soul* (*De Anima*) was not known in the West until it was translated into Latin in the twelfth century. But soon everyone was reading it, and Aristotle’s way of understanding the soul in terms of what it does became the standard way of asking questions about the intellect. The Platonic paradigm, as mediated by Augustine, dominated discussions of the intellect until that time, virtually by default.

One final textual note: although these two models appear to be in tension with one another, they were often presented as complementary, especially by later medieval authors who sought to harmonize the Christian philosophical anthropology of Augustine with the faculty psychology of Aristotle. This was a difficult task, to say the least, and it gave rise to some of the most sophisticated and original philosophical work that was done in the Middle Ages, some of which influenced thinkers in the early modern period.

Augustine

On the Platonic/Augustinian picture, “intellect” refers to the highest activity of the human soul, that is, to thinking or understanding the eternal, unchangeable truths that are not of this world. Augustine distinguishes intellectual vision from two other activities of the soul: corporeal vision, which concerns bodily sensations, and spiritual vision, which trades in particular signs, images, and likenesses of things. These three powers form a hierarchy, with intellect at the top: “corporeal vision cannot take place without spiritual, since at the very moment we encounter a body by means of bodily sensation, there appears in the soul something not identical with the

object perceived but resembling it,” and likewise, “spiritual vision needs intellectual vision if judgment is to be made upon its contents, but intellectual vision does not need spiritual, which is of a lower order” (*Literal Commentary on Genesis* 1982: 214, 12.24.51). Augustine’s idea is that in its highest state of active thinking, intellect is free to roam among the intelligible forms that are its proper objects, without needing bodily prompts in the form of sensations or spiritual prompts in the form of images or likenesses.

But, unlike the Platonists, Augustine believes that the intellect cannot achieve this state on its own, an inability he connects with our moral journey in this life from sin to a state of grace. The intellect cannot fully grasp the truth, or hold it for very long if it does, unless the soul is purified of its wicked desire for temporal things. Quoting scripture, Augustine tells us that when we reach this state, we shall know the truth, and the truth will make us free (*On the Trinity* 2002, 4.18.24; cf. John 8:31–32). Furthermore, in an unprecedented “christianizing” addendum to what would otherwise be a straightforwardly Platonic theory of intellect, Augustine argues that the intellect’s characteristic act of understanding is assisted, and tempered, by faith—a view emblematically expressed in his famous remark, “faith seeks, understanding finds [*fides quaerit, intellectus invenit*]” (*Trin.* 2002, 15.2.2). For Augustine, faith is an affective disposition of the soul that works in tandem with intellectual inquiry, pushing it forward when what we are seeking seems incomprehensible or when the search seems unending. He is again inspired by scripture to think of the created, material world as a ladder we can climb to reach the highest truth, citing the book of Romans: “For since the creation of the world His invisible attributes, His eternal power and divine nature, have been clearly seen, being understood through what has been made” (Romans 1:20). The relation between these traces and our intellectual understanding is dialectical: we “see” more the more we seek, and the more we seek the more we understand. Our own minds are understood by a similar procedure, emerging from the conviction that God is triune, which we hold on faith. “I first sought traces of [the highest Trinity] in the creature,” Augustine tells us, “and proceeded, as it were, step by step through certain trinities of its own kind until I arrived at the mind of man” (*Trin.* 2002, 15.2.3), which Augustine also takes to have a triune structure, composed of memory, understanding, and will.

As in so many other areas of philosophy, the impact of Augustine’s way of thinking about the intellect is difficult to underestimate. In the Latin West, his successors all took for granted his picture of the intellect as our ultimate perfection, a God-given power that determines not only our place in creation, but also our individual natures—the latter thanks to its prominent role in Augustine’s personal narrative of salvation and redemption. Explicit references to Augustine abound in later thinkers. But the implicit references are even more numerous and impressive. Thus, with regard to our “rational nature,” Anselm of Canterbury (1018–1109) is struck by our ability to sit in judgment of other things: “to be rational is simply to be able to tell the difference between the just and the unjust, the true and the untrue, the good and the not good, and the greater and the lesser good” (*Monologion* 1998: 73, c. 68). And, like Augustine, Anselm also thinks that the intellect needs faith in order to exercise its proper agency: “the understanding which we gain in this life stands midway between faith and revelation” (*Why God Became Man* 1998: 260). Augustine’s theory was never fully displaced with the advent of Aristotelian psychology in the twelfth century; more typically, Aristotle’s Western readers sought to understand what he was saying about the intellect in terms of what they knew already, which was the Augustinian paradigm.

Aristotelianism

The late twelfth-century appearance of Aristotle’s writings on metaphysics, natural philosophy, and ethics changed the course of philosophy in the West. But Aristotle’s first readers found his works difficult and obscure, so naturally they turned to the commentary tradition (also newly

translated) for help in understanding them. In psychology, the commentaries of the Muslim philosophers Ibn Sina (or “Avicenna,” as he was known to the Latins, c. 980–1037) and Ibn Rushd (“Averroes,” c. 1126–1198) were by far the most influential. Both authors offered interpretations of Aristotle’s theory that appeared to clash with the Augustinian paradigm of the intellect as the immanent power and seat of the self. Avicenna made Aristotle’s agent intellect into a transcendent agent, a single substance in which all humans participate when they think, and which also serves as the storehouse of universal concepts; thus, when someone is thinking, e.g., of the Pythagorean theorem, the agent intellect sends the appropriate universal concept to his/her “possible” intellect, which is immanent and which plays the receptive or passive role in the intellectual act. Likewise, Averroes believed that both the active and passive aspects of the intellect are transcendent, so that when multiple people are thinking of the Pythagorean theorem, they literally have the same concept in mind—though the “mind” in question does not belong to each of them severally. The only thing connecting this transcendent intellect to an individual human is a particular sensory image in his/her soul, which occasions the higher activity.

Averroes’s clarity of style, convincing argumentation, and introduction of commentary sources from late antiquity such as Themistius and Alexander of Aphrodisias quickly gained him adherents among teachers in the new universities in Europe, and especially at the University of Paris. This group later came to be known as “Latin Averroists.” Foremost among them was Siger of Brabant (c. 1240–1284), an Arts Master whose teachings on the intellect soon alarmed University and Church authorities because they seemed to undermine Catholic teaching on the human soul. The controversy gradually turned into a jurisdictional squabble between the Faculty of Arts, which was charged with teaching Aristotle’s writings to undergraduates, and the Faculty of Theology, a graduate faculty concerned with sacred doctrine and the interpretation of scripture and the authoritative writings of Church Fathers such as Augustine. Things came to a head in 1277 with the Condemnation of 219 Propositions by Bishop Stephen Tempier of Paris (trans. Fortin and O’Neill 1963). The Condemnation document explicitly rejects Averroistic teachings on the human soul, including the ideas “that the intellect is numerically one for all” (Article #117), “that the intellect, which is man’s ultimate perfection, is completely separated” (#126), and “that the agent intellect is not united to our possible intellect, and that the possible intellect is not united to us substantially” (#140). Two things should be noted about the Condemnation, however. First, although its aim is to identify clearly the views that must not be held, it also, and rather transparently, pushes the focus of philosophical and theological inquiry back in an Augustinian direction. Thus, where the human intellect is concerned, the Condemnation is not just about the erroneous views of Averroes (and Aristotle, as radically interpreted by Arts Masters such as Siger); it is also about the true teachings of Augustine. This much can be seen in the reference to the intellect as “man’s ultimate perfection” in Article #126. Second, if the aim of the Condemnation was to dampen the influence of Averroes and Aristotle on the Arts Faculty at Paris, it was not successful. Averroes continued to be the most popular commentary source on Aristotle’s *De Anima* well into the fifteenth century, even among non-Averroists, who were interested in his arguments and wanted to reply to them. What is more, Latin Averroism still found advocates in philosophers such as John of Jandun (c. 1285–1328) and Matthew of Gubbio (fl. mid-fourteenth century), who were apparently able to teach and work without institutional censure.

One of the reasons Averroes continued to be read was that a powerful philosophical response to his theory of the intellect emerged just prior to the Condemnation of 1277. This was the moderate Aristotelianism of Thomas Aquinas (1225–1274), who developed an interpretation of the Aristotelian paradigm much more in keeping with Church teaching on the human intellectual soul as the seat of the self. Aquinas finesses Aristotle’s theory in an Augustinian direction by arguing that the intellect is not the essence of the human soul, but a power it possesses by participation in a superior intellect, which is “immovable and perfect” (*Summa Theologiae* 1948: 344, Ia,

q.79, a.4). “In God alone is his intellect his essence,” says Aquinas, whereas “in other intellectual creatures, the intellect is a power” (*Summa Theologiae* 1948: 337, Ia, q.79, a.1). In humans, the intellect is a power belonging to the substantial composite of body and soul. Accordingly, only God manifests perfect understanding; human understanding is imperfect, as is evident from its discursive nature, although it remains true that “among sublunary things, nothing is more perfect than the human soul” (*Summa Theologiae* 1948: 344–345, Ia, q.79, a.4). This allows Aquinas to locate the intellect’s agent and patient functions in the human soul itself, in a way that makes sense of Aristotle’s notion that all cognition involves receiving form without matter:

nothing prevents one and the same soul, inasmuch as it is actually immaterial, from having a power by which it makes things actually immaterial, by abstraction from the conditions of individual matter (this power is called the *agent intellect*), and another power, receptive of such species, which is called the *possible intellect* by reason of its being in potentiality to such species.
(*Summa Theologiae* 1948: 346, Ia, q.79, a.4, ad 4)

Perhaps an Averroist might counter that it does not befit a power as sublime as the intellect to be immersed in the human body. Aquinas responds to this concern in the polemical treatise, *On the Unity of the Intellect against the Averroists*, c. 84 (1993: 99):

The human soul exists in its own right and is to a degree united with a matter that does not wholly capture it—this form is greater in dignity than the capacity of matter. Nothing prevents it having some operation or power <i.e., intellectual understanding> to which matter does not attain.

One can easily imagine Augustine agreeing with this way of characterizing the activity of the intellect.

The Later Middle Ages

The Condemnation of 1277 paved the way for an Augustinian backlash against the Aristotelian account of the intellect, especially in its Averroist manifestations. There was also a movement, by John Duns Scotus (c. 1265–1308) and others, to rework the theory of the agent intellect along more spiritual as opposed to “this-worldly” lines, the idea being that our psychological theories should speak to the human soul in its natural state, which was determined when God created us, prior to the Fall and the impoverished epistemic circumstances in which we find ourselves in this life. The great nominalist thinker, William of Ockham, took a slightly different approach. Although he did not write a treatise on psychology, he was interested in the nature of intellectual acts. Thus, in his early writings, he argues that when we think of universals, the object of our thought is nothing more than a *fictum*, or mental image, because (he maintains, being a good nominalist) there are no universals outside the mind. But later he rejects this on the grounds of parsimony: universal cognition is just the act of thinking many things at once; there is no special image needed: “an act of understanding is sufficient for this,” he says, “since a fictive entity [*fictum*] is just as singular in its existence and in its representing as an act of understanding is” (*Quodl.* 1991: 390, 4, q.35; for the influence of Ockham’s account, see Zupko 2013).

But Thomas Aquinas’s efforts to redeem the Aristotelian paradigm as a theologically orthodox way of modeling the human soul were successful insofar as *De Anima* remained the canonical text of later medieval philosophical psychology. His position even came to be identified with that orthodoxy. In his influential commentary on *De Anima*, John Buridan (c. 1300–1361) describes three “famous” positions on the nature of the intellect: the materialism of the late antique commentator,

Alexander of Aphrodisias (fl. second to third century), the monopsychism of Averroes, and “the truth of our faith,” which he elsewhere identifies with the teaching of Thomas Aquinas. Buridan depicts the orthodox position as splitting the difference on six key properties that divide the more extreme positions of earlier commentators. Thus, Alexander thought that the intellect is mortal (or not everlasting), generated and corruptible, derived from matter, inherent in matter, extended, and numerically many. Averroes denies these six. The position of the faith is reached by taking the first three from Averroes and the second three from Alexander (*Questions on Aristotle’s De Anima* III.6; texts in Zupko 2004). Ultimately, though, Buridan concedes that there are no decisive arguments favoring the orthodox position on the intellect, and that it is likely that “a pagan philosopher would maintain the opinion of Alexander” (ibid.: III.4).

The controversy surrounding the Condemnation of 1277 had another, more lasting effect, however, which was to drive a wedge between philosophical and theological treatments of the human intellect, so that the intellect would be discussed in one way by philosophers commenting on *De Anima* and in another by theologians commenting on the *Sentences* of Peter the Lombard (c. 1096–1164), the Augustinian textbook which was the primary genre of later medieval theological writing. Sometimes, we get two different accounts written by the same author, as in the case of the arts master turned theologian Peter of Ailly (c. 1351–1420; see Pluta (1987) for more on Peter of Ailly). This point is sometimes missed by scholars of early modern philosophy who are looking for medieval antecedents of the modern theory of the mind. It would make a difference whether Descartes was reading *De Anima* commentaries or *Sentences* commentaries, for example, because he would have been getting different accounts of the intellect in each case.

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20

WILL

Cyrille Michon

What is the concept of will and when did it appear? Dihle (1982) assigned it to Augustine and his biblical roots; other scholars have defended an earlier origin: with the Stoics (Voelke 1973) or with Aristotle (Irwin 1992), or a later one: with Maximus the Confessor (Gauthier 1954). Recently, Sorabji (2003) has confirmed Dihle's diagnostic, while Charles Kahn (1988) took the ecumenical view of a progressive constitution through all those steps. One might also deny that there is one concept of will and trace back our different notions to different origins (Bourke 1964). But, whatever one thinks of the unity and the origins of the concept or concepts of will, it seems undeniable that in medieval Latin thought, the word *voluntas* is commonly used as a very broad concept to mean an act and/or a faculty of the rational soul (or of the soul of rational creatures), appropriately attributed to pure spirits and to God. In the Middle Ages, two meta-processes are at play, not necessarily with the same force and path: one of *unification* and one of *promotion*. The Augustinian tradition dominates first and then merges with the Aristotelian conception of action, leading to Aquinas's synthesis. We will see reasons for attributing a major influence to the elaboration of the concept of will on an Augustinian basis in the eleventh and twelfth centuries (the section "The Augustinian Tradition"), and then reasons for acknowledging Aquinas's effort to synthesize the most relevant elements concerning human action (the section "The Aristotelian Synthesis of Thomas Aquinas"). But it can also be argued that a major shift occurred with the clash between most theologians and Aristotelianism at the end of the thirteenth century. The will and its freedom at that time were promoted against and above reason in a very conscious process. If one adopts as a concept of will that of a power free and active by itself, capable to adjudicate between different options and different desires by its own act (volition), then there is a case for the thesis that such a concept was fully elaborated by the voluntarist thinkers, mostly Franciscans, of the late thirteenth and early fourteenth centuries (the section "The Clash").

The Augustinian Tradition

The vocabulary of the will was unified by Augustine, who also gave the will a preeminent position in the moral life (analysis of sin and merit), in the doctrine of grace (received as a light in the intellect and as a pleasure and inclination in the will), and in his description of human psychology (a trinity in the soul analogous to the divine Trinity: the mind/memory is analogous to the Father, reason/intelligence is analogous to the Son, and the will/love is analogous to the Holy Spirit). Relying on concepts mostly coming from Stoicism, Augustine had to conceptualize Christian doctrine and dogmas, and mostly Paul's teaching on grace and will. But some confusion

remained, since it is not clear whether Augustine takes the will to be a faculty (see Rist 2014 for the thesis that he does not), and since he does not distinguish between inclinations and acts (what will later be called *volitio*). “*Voluntas*” marked neither a strict distinction between sensual desires and rational ones having as objects only what a rational power could apprehend, like happiness, nor what only such a power could present as desirable (virtue, God’s vision). Anselm of Canterbury (1033–1109), mainly building on Augustine’s work, introduces those distinctions. He sets apart the will as instrument (the faculty), its dispositions or affections and its uses or acts (*De libertate arbitrii* 3, 7; *De conceptu virginali* 4; *De Concordia* 3.11—all references to Anselm’s works can be found in translation, in Anselm 1998). Anselm famously considered that the human will has two fundamental inclinations: one for what is pleasant and agreeable (the *affectio commodi*), mainly coming from sensual desires, and one for righteousness or justice (the *affectio iustitiae*), due to reason in human beings (*De Casu diaboli* 4 and 13; *De Concordia* 3.11–13). The will is affected by both and may have to decide when they enter in conflict. This opposition of the two basic affections is the root of moral responsibility, for there is sin when the *commodum* is preferred to the *iustum*, merit and virtuous act in the other case (if the affection for justice is lost, as in hell, the will is no longer free, *De Concordia* 3.13). Lucifer’s sin is paradigmatic of the prevalence of one affection over the other without any explanation other than a pure act of will (“*non nisi quia voluit*”: *De casu diaboli* 27; *De Concordia* 3.14).

The act of choice is then the cornerstone of the moral life, and Anselm follows Augustine in calling *liberum arbitrium* the power of choice (and deforms Augustine, according to Rist 2014, in taking *liberum arbitrium* for a faculty of the soul). Though Peter Abelard (1079–1142) does not consider as much the topic of freedom, and still uses the term *voluntas* to mean desires and inclinations of any kind, he is famous for having restricted all moral values to consent and intention of the will (*Ethics* 1995: 4, 14, c. 3). The term “consent” underlines the power to choose between options; the term “intention” refers to the content of every choice (King 1995; Marenbon 1997: ch. 11). They are like the two components of a single interior act that gives way to one over other desires or motives. On Abelard’s view, consent/intention is the only intrinsic bearer of moral value. The overt, exterior action is morally indifferent, as are also the previous desire and the pleasure aroused by the deed (*Ethics* 1995: 13; *Dialogue* 1995: 99). Abelard’s doctrine was very influential on twelfth- and thirteenth-century thinkers, despite the fact that it was never quoted because Abelard had been condemned for different positions in theology (for example, his remark that “the whole quality of deeds should be taken according to the root of intention (*radix intentionis*)” (as quoted by Marenbon 1997: 252) is a proposition condemned at the Council of Sens). Even if he will disagree about the complete neutrality of the exterior deed, or about the involuntariness of certain choices, Aquinas will follow Abelard in giving consent and intention a central role in moral evaluation. In the fourteenth century, William Ockham will vindicate Abelard’s doctrine of the moral neutrality of the action that follows from a mental volition. Only the volition has an intrinsic moral value; virtues and vices are habits bearing directly on the acts of the will, and only indirectly on the acts that they command and cause.

For his part, Anselm refused to define freedom as the power to choose between good and evil. Such a power to sin cannot apply to God nor to the beatified angels and souls. Following Augustine, he saw in the powerlessness to sin (*non posse peccare*) a greater freedom than in the power to sin (*posse peccare*), itself above our present state of misery which is a powerlessness to avoid sinning (*non posse non peccare*). And he opted for a very particular definition of freedom as the power to keep the righteousness of the will for its own sake, because such a definition applies also to God (“*Libertas arbitrii est potestas servandi rectitudinem voluntatis propter ipsam rectitudinem*,” in *De libertate arbitrii*, c. 3–4; cf. *De veritate* 12; *De conceptu virginali* c. 3). Bernard of Clairvaux (1090–1153) is more traditional and influential in making a threefold distinction between the freedom from misery allowed only by glory, the freedom from sin, allowed with the help of grace, and the freedom from necessity, which does not exclude the power to sin, but which cannot be lost, being innate

(*ingenita libertas*) and given to humans by nature. This lowest kind of freedom is sufficient for *liberum arbitrium* and necessary for the two other kinds (*De gratia et libero arbitrio* 3.6–4.9; translation in Bernard 1989). For Bernard, there is no will without freedom, no freedom without will: *Ubi voluntas, ibi libertas* (ibid.: 2.2).

Bernard might be the first thinker to consider explicitly the question that will concern theologians of the late thirteenth century: the relation between will and reason. Reason is given for instruction but not in a way that would determine the will and suppress freedom: consent, which is the root of justice and injustice, is free in virtue of the will, but bears with it a judgment of reason in the agent (ibid.: 2.4). Reason is the servant of will (*predissequa voluntatis*, ibid.: 2.3), a counselor who might be needed to present options, and justify a preference, but whose judgment does not necessitate the act of the will. The will, identified with free will, is the real master in the human person (though good will makes us the property of God, bad will of the devil; ibid.: 6.16). Bernard even says that freedom is the proper locus of God's image in man, or rather the first degree of freedom is the image, the two others constitute the resemblance (ibid.: 9.28), contrary to a tradition that passes through Augustine and says that reason—maybe in a sense that includes rational willing—is God's image. But Bernard's is an extreme position, and when Peter Lombard (1100–1160) writes his *Sentences* in the 1150s, he also echoes thinkers who see in the working of *liberum arbitrium* and choice a collaboration between reason and will.

Peter Lombard's work is the main synthesis of medieval thought at the time, and it remained the source and basis for the teaching of theology for centuries. On the topic of the will, he welcomes quite a lot of contributions and distinctions. Most come from Augustine, through Anselm or Hugh of Saint Victor (1096–1141) in his effort to describe God's will (will of good pleasure vs will of sign, antecedent vs consequent will, distinction of four wills in Christ). The central notion is that of *liberum arbitrium* and the question raised and debated by Peter (in the *Sentences* II.25) is whether it is a third faculty in addition to reason and will, and presumably superior to them, or the will only in its disposition to choose between options, or a common disposition to both reason and will. All these positions had been or will be defended throughout the Middle Ages. The Lombard seems to rally with the last one. He gives credit to the explanation that relates the *arbitrium* to reason and its freedom (*liberum*) to the will. The two major authorities in the discussion are Boethius's definition, considered philosophical, of the *liberum arbitrium* as a judgment bearing on the will (*iudicium de voluntate*), and a definition attributed to Augustine (but only found in Lombard's text *Sent.* II.24.3), and that will be considered theological, saying that *liberum arbitrium* is a faculty of both reason and will (*facultas rationis et voluntatis*).

In fact, authors on all sides seem to admit that the will cannot will, nor the *liberum arbitrium* choose, without some guidance by reason (on all this, see Lottin 1957). It belongs to the rational faculty to discern between good and bad, and so to tell which option is the good one. And they all seem to admit also that the will can consent to or dissent from reason's suggestion. But there are two ways of looking at the same scene where one actor tells the other which way to go and the other decides whether to follow the advice. It is quite easy to split the different authors into two groups. There are those who consider, with the Hellenistic tradition, that reason is the leading faculty. To this view belongs William of Auxerre, who explicitly assimilates the *liberum arbitrium* with reason and says that reason is the best part (*optimum*) in the soul, the most imperative (*impe-rantissimum*), and that it can be called king (*rex*) and leader (*dux*) of the others.

The other interpretation insists that reason's advice is given by a servant (Bernard's *predissequa*) to his master or his mistress: the will ultimately decides and commands the other parts of the soul. This is the view of, or at least the language used by, the *Summa Sententiae*, Gilbert of Poitiers, William of Auvergne, Alexander of Hales, and even in a way by Albert the Great (c. 1200–1280), who insists in his *Summa de homine* (2004) that the *liberum arbitrium* is the real head over reason and will. A special mention must be made of Philip the Chancellor (1165–1236) who in the 1220s

defends the view that reason and will should not be considered as two *really* distinct faculties (as other powers in the soul can be).

Bonaventure (1217–1274) gives an idea of the state of the art in the middle of the thirteenth century, one century after Peter Lombard. In his commentary on the *Sentences* (volumes I–IV in Bonaventure 1882–1902), in the chapter about *liberum arbitrium* (bk. II, d. 25), Bonaventure counts himself with those who do not make the *liberum arbitrium* a third faculty in addition to reason and will. After attributing *liberum arbitrium* to rational beings only, since the *arbitrium* is the judgment of an intellect on what is just and unjust, which presupposes the power of reflection and so immateriality (q. 1), he goes on to say that its distinction from reason and will is only *secundum rationem*: it is a *facultas* of both according to Peter Lombard, but that means a facility not a faculty (q. 2), or a *habitus* (q. 5). Reason and will concur as the father and the mother do who constitute a unique power to manage the family, or as the hand and the eye do to write (q. 3). This implies that the act of choice involves both reason and will. But there is a distinction in that reason is the proper place for the beginning of free choice, and will is the proper place of its ending. Does the will always follow reason? No, if one thinks of the first judgment, the *dictamen* of reason, which says what ought to be done. Yes, if one means the definitive judgment about what to do (all things considered), but in that case this act cannot be said to belong to reason alone: “the will attracts this other act to itself.” Bonaventure certainly holds that the will is active and can go against the judgment of reason alone. But he does not go as far as Bernard in taking the will for the proper image of God in us. He rather says that “image and resemblance” must be understood as referring to cognitive and volitive powers (*Sent.* II.16.2.3). And he does not separate the two aspects in his account of glory and beatific state: vision, love, and joy must be referred to reason and to the concupiscible and irascible appetites (*Sent.* IV.49.1.1.5).

The Aristotelian Synthesis of Thomas Aquinas

Bonaventure was the contemporary of Thomas Aquinas (1225–1274) who lectured on the *Sentences* a few years later. Even though they both had the same Aristotelian background, Aquinas, following his master Albert the Great, did much more to combine the traditional psychology inspired by Augustine and his medieval followers with the one coming from Aristotle and his Arab commentators. In the end, the synthesis revealed the potential tensions between the Greek conception that emphasized the rationality of human beings, and the Christian one centered on love, freedom, and will.

In a way that became common in the thirteenth century, Aquinas defines the will as the rational or intellectual appetite (*appetitus rationalis*, *appetitus intellectivus*). This is an Aristotelian concept transmitted by the translation of John Damascene’s *De fide orthodoxa* (*Burgundionis versio* 1955, 36.8–15). Aquinas gives it a precise meaning. The will is the motive power of the intellectual part of the soul (*Summa theologiae* [ST] 1963, 1.80). It is thus a faculty on its own. It issues desires that do not belong to the sensible part of the soul, and it can adjudicate between opposite desires, since it belongs to its dominant part (the intellective one). Aquinas certainly goes farther than Aristotle in admitting a distinction between the volitions as elicited acts (*actus elicit*) and the acts of the other faculties of the soul and of the body, that are commanded by the will (*actus imperati*) (ST 1–2.8, 17). Using this distinction, he says that the will has a *despotic* power over the body, and only a *political* one over the other faculties (ST 1–2.9.2 ad 3). Finally, Aquinas justifies the use of the term *voluntarium* (meaning “coming from the will”—a *voluntate*) to translate Aristotle’s *hekousion*. Aristotle meant every act that is morally imputable to the agent, excluding those performed under constraint or by ignorance. Some voluntary actions may proceed from passion from a sensual desire, and so not directly from an act of will. But, Aquinas explains, they are voluntary if (and because) they remain under the control of the will. If the agent could have avoided those acts, by an explicit act of will, they are responsible for them and those acts are voluntary (ST 1–2.6.3).

Concerning the will's proper acts, Aquinas follows John Damascene's analysis of human action in different steps or stages (ST 1–2.8–16). This analysis had some success in the time of Abelard, who finally put the whole emphasis on *consent*. I mentioned that Aquinas followed this idea, giving to choice (*electio*) the important weight in moral life. But important as it is, choice is only one of the steps leading to fully accomplished action. And Aquinas distributes those steps between reason and will, both before and after the act of choice. Beginning with the intellectual consideration of some good, the first act of the will is the simple willing (*voluntas, velle*), which is the rational tendency toward the apparent good (ibid.: q. 8). The intellect judges that this good is an end attainable through some means, and the will *intends* to achieve it through them (*intentio*, q. 12). The intellect then deliberates and compares the different means, if there are any, and the will *consents* to them (*consensus*, q. 15). The intellect judges that one course of action (a means) is better, and the will *chooses* it (q. 13). After choice, it belongs to the intellect to *command* the action (*imperium*, q. 17), and to the will to execute the command by *using* (*usus*, q. 16) the different relevant faculties (mental and/or corporeal). Once the action is completed, the will is still at play when it *rejoices* in the good obtained (*frui, gaudium*, q. 11). Most of the considered steps are present in Aristotle's study of human action in the *Nicomachean Ethics*, and so, too, is the distinction between voluntary and involuntary. But they are not attached to a single faculty. Nonetheless in commenting upon the Philosopher's text, Aquinas does not hesitate in attributing to him the concept of will, and according to modern scholars, he might be right in doing so, showing that in the end Aristotle had a concept of, but no name for, the will (Kenny 1979, 1993; Irwin 1992; Hoffmann, Müller, and Perkams 2013 for more on Aquinas and Aristotle on the will).

The proper object of the will is the good. The will cannot tend toward something that is (or seems) not good (ST 1–2.8.1). Concerning particular or concrete goods, there is some necessity of willing only with reference to the supreme good, happiness, and what is considered as a necessary means toward it (ST 1–2.1.6). When confronted clearly with such a good, as in beatific vision, the will necessarily wills or loves it (ST 1.82.2; 1–2.13.6). The will considered as intending the good in general or the supreme good in particular is a natural (though rational) tendency. Though such natural willing is necessary, in that case Aquinas allows for Augustine's talk of a will that is free (*libera voluntas* as opposed to *liberum iudicium*), since there is no form of constraint, and the will's act is wholly dependent on the will (*Quaestiones disputatae de veritate* [QDV] 1970–1976, 24.1 ad 20). This also applies to the wills of angels and to God's will, for example, in the love of Himself which is both necessary and free. But this necessary and natural willing is not free in the sense of the ability to do or choose otherwise. This is the proper meaning of *liberum arbitrium*, which is nothing else than the power of the will in its proper act of choice between different goods. *Libera arbitrium* can apply only to finite (created and limited) goods, concerning which one can deliberate. The will is then considered as a rational power, having access to the opposites (*via ad opposita*), the way Aristotle defined “rational powers.” (When considering Christ's wills, Aquinas also uses the traditional label of the *voluntas ut ratio*, will as reason, in opposition to the first, will as nature, *voluntas ut natura*; see *In Sent.* 1929–1947, 3.17.1.3; ST 3.18.) Choice bears only on means, since one deliberates on how to reach a given end by considering the appropriate means. But any end can be considered as a means toward a further end, except the ultimate end in itself. So it seems that for the most part, human actions are not only voluntary (i.e. caused by the will or under its control), but contingent and under the control of the will understood as *liberum arbitrium*. It is a necessary condition of the whole moral life (ST 1.83.1). God and beatified angels and souls *have liberum arbitrium*, but only between equal goods, they cannot choose evil and do not have this kind of freedom between good and evil which is proper to rational creatures without beatific vision.

Aquinas is quite traditional in defining *liberum arbitrium* not as a third faculty, but as emerging from both reason and will, though it can properly be said to be the will's power (ST 1.83.4). Concerning the act of choice, he says that the will is its subject, while reason is the formal or

the final cause, since it is the object (i.e. the good apprehended by the intellect) which moves the will as its end. This has given rise to a major dispute both in Aquinas's time and among contemporary commentators (see below). At the same time, Aquinas insists on the freedom of choice as incompatible with necessitation, and he concedes Aristotle's description (*DA* III.30) of the appetite as a passive power, or a *moved mover* (*movens motum*). This has to be understood at least in two ways. First, the initial movement of the will comes from the sensitive appetite, or even from God, the first mover of everything and creator of the will. Second, in any act of will, including choice, a principle of essential motivation (MacDonald 1998) is at play: the will follows the judgment of reason. That willing an object presupposes some awareness of it, and even of its goodness, is not controversial. But the principle of essential motivation seems to imply that reason determines the will, so that, contrary to Bernard's doctrine, it cannot go against reason. Some texts favor this form of strong intellectualism (Hause 1998), while others seem to admit that the will is never necessitated by the judgment of reason (Hoffmann and Michon 2017). Aquinas recognizes that the will moves the intellect (in directing its attention), and that the intellect moves the will (in presenting the object). Distinguishing freedom of specification (to choose and do this rather than that) and freedom of exercise (to act rather than not), Aquinas sometimes says that specification belongs to the intellect, and exercise to the will (*De Malo* 1982, q. 6). One way out is to underline Aquinas's saying that the root of freedom is in reason ("*totius libertatis radix est in ratione constituta*," QDV 24.2). Able to reflect on itself, to consider the end as an end, and the relation of means to ends, reason can always consider different aspects of the proposed action so that which one will be chosen is not predetermined. Another way out would be to deny the real distinction between the act of will and that of practical reason in choice. Aquinas insists in the *Summa theologiae* that both faculties contribute to the whole act as matter and form (ST 1–2.13.1).

Whatever the correct interpretation of Aquinas (see Stump 2003: ch. 9), an intellectualist accent is undisputable. It goes with his repeated affirmation that the intellect is the simplest and so the best part of the human soul. It is true that in some places this is said not with reference to the relation between intellect and will, but rather with the presupposition that will belongs to the intellective part of the soul. See, for example, Aquinas's conception of the image of God in man: its proper locus is the soul rather than the body (which is only a vestige of God), and the intellect rather than the sensitive part of the soul. Augustine's trinity of the soul (*mens, notitia, amor*) is an image of the divine Trinity and it includes love or will as corresponding to the Holy Spirit. But, to the question whether the will is more eminent than the intellect (ST 1.82.3), he answers with caution: simply speaking (*simpliciter*), considering the faculties in themselves, the intellect is superior because its proper object (the very property of goodness—*ratio bonitatis*) is more abstract and absolute than the proper object of the will (the good and desirable being, *bonum appetibile*), but in a certain respect (*secundum quid*), the object of the will may be sometimes higher than the object of the intellect, which is the thing thought, as being in the mind. It happens when the object of the will, outside of the human mind, is higher than the intellect and its forms, e.g. when God is loved. Concerning beatitude, Aquinas holds that the union of the soul with God is (or will be) through intellectual knowledge, and is properly called contemplation or vision. This seems to make the intellective power and act more important than will and love. But Aquinas also affirms that this union ends up with the joy resulting from such union (Augustine's *gaudium de veritate*, in *Confessions* book X) which is a proper act of the will (ST 1–2.3.4).

Aquinas's intellectualism is then quite moderate and welcomes most of the traditional affirmations before him. But he also opens the door to a more radical form of defense of his positions and to more radical rejections of them. The following years show that he provoked a crisis rather than a peaceful agreement.

The Clash

The controversy that occurred in the last third of the thirteenth century around the question of the will, its nature, its value, and its freedom, is one aspect of a larger controversy, prompted by the so-called “Latin Averroism.” This movement, better described as “radical Aristotelianism,” grew up among the arts masters, the philosophers who taught Aristotle with the Arab commentators, mainly Averroes. All along during that century, some Aristotelian theses had been condemned as incompatible with Christian faith: the doctrines of the eternity of the world, of the unicity of human intellect, of the possibility of mundane beatitude among philosophers. The novelty was that those theses now seemed (to the critics) to be sustained by some masters at the University (Siger of Brabant, Boethius of Dacia) and to be receiving surprising support from some theologians—above all from Aquinas, in his effort to harmonize the Philosopher with the Bible. Even though the arts masters did not defend the “heretical” views of Aristotle or Averroes, they argued that those views were what natural reason unaided by faith led to. It also appeared (to some) that Aristotle’s psychology of the will and analysis of action might go against the Christian doctrine of human freedom and of the superiority of charity over the other virtues. According to Siger of Brabant, it is the only reason that could break the deterministic chain coming from the stars, because it could consider different goods to be pursued (*Quaestiones super librum de causis* 1972, q. 25). Reason allows a power of veto, and is certainly the only real master in the human soul, and the will necessarily follows the determination of the intellect (“*Existente apprehensione . . . necesse est hominem appetere*,” *Quaestiones in Metaphysicam* 1981: 330, V.8).

Radical Aristotelianism came under harsh criticism from the Franciscan masters in the late 1260s. Bonaventure had reacted with vigor, in a series of sermons from 1267 to 1268 called *Collationes in Hexaëmeron*, but with more concern for the topics of creation and the human soul than for the conception of the will and freedom. His successor at the University of Paris, Walter of Bruges (c. 1227–1307), filled the gap. He was followed by a secular master, in the early 1270s, Henry of Ghent (1217–1293), who argued against Aquinas and the Averroists, in favor of the superiority of the will over the intellect, its freedom being irreducible to the mere following of reason, and its ability to determine itself. Henry was a member of the group of theologians who constructed the list of 219 propositions condemned in 1277 by the bishop Stephen Tempier, head of the University of Paris. About twenty of them bore on the topic of the will and its freedom, and the “Augustinian” tradition was vindicated against any contamination by Aristotle’s intellectualism, which was seen as a form of determinism (in Hissette 1977: art. 150–169). Among them, one can quote art. 163: “The will necessarily follows what is firmly believed by reason; and it cannot refrain from what reason dictates. This necessitation is not coercion, but it is the nature of the will.” This conception of the submission of the will to reason seemed to go hand in hand with the idea that sin was only an error (art. 167), or could only come from the inferior powers of the soul, from passion (art. 169). A parallel attack, led by William of La Mare’s treatise *Correctorium fratris Thomae* (1927), was directed explicitly against Aquinas’s teaching. At the far extreme, a marginal but very influential Franciscan, Peter Olivi (1248–1298), argued forcefully against Aristotle and the use of his philosophy, which he considered to amount to introducing heresy, or worse, paganism into Christian teaching, specifically on the question of the will and its freedom. Olivi went farther than Henry in saying that the will is fully active, by itself. To this vast wave of voluntarism led by the majority of traditional theologians, some (mostly Dominicans) did respond. But the most eloquent one at the faculty of theology of Paris was a secular priest, Godfrey of Fontaines (1250–1309), who opposed many of Henry of Ghent’s teachings, and even questioned the condemnations of 1277. Godfrey adopted a line inspired by Aquinas, but which was more radically intellectualist. Others responded to William of La Mare on the interpretation of Aquinas’s texts (these defenses of Aquinas are now called the literature of *Correctoria*).

Most of the arguments *pro* and *contra* adduced in this huge controversy are taken up by Gonsalvus of Spain (1250–1313) in his *Quaestiones Disputatae* (1935) on the intellect, the will, and beatific vision at the end of the century. Gonsalvus became the General Minister of the Franciscan order at the beginning of the fourteenth century as he was teaching at the University of Paris where his classes (and a dispute with Meister Eckhart) might have been attended by John Duns Scotus who largely adopted Gonsalvus's views on the will. His disputed questions offer a good overview at the eve of fourteenth century of the controversy during the thirty preceding years. Officially bearing on the nature of the (intellectual) act of praising God (*actus laudandi Deum*), they raise some of the traditional worries about the will at that time: is the will superior in dignity to the intellect, does the will determine, specify, or actualize itself, can the will go against reason's judgment, or is the will free in itself? As Bonnie Kent has remarked (1995), the interest has shifted from the nature of *liberum arbitrium* (before 1270) to that of the freedom of the will, understood as its independence from reason. Gonsalvus often distinguishes three positions: that of Godfrey, which we might call fully intellectualist, that of Aquinas which is moderately so, and that of Henry, which illustrates voluntarism. The traditional Bonaventurian position is not really represented, nor are the two extremes: Siger on the intellectualist side, Olivi on the voluntarist one. In fact, one can find identical arguments in Siger and Godfrey, or in Henry and Olivi. It might be good, nonetheless, to keep separate those who say that both reason and will are efficient causes of choice (Bonaventure), those who think reason is only a necessary or *sine qua non* condition (Henry and most voluntarists after him), and the extreme Olivi who says that the will is fully active and in no need of a complementary cause. Finally, the arguments used on both sides do not make much difference to the moderate and the extreme position.

On the intellectualist side, one should stress the psychological and phenomenological facts that one chooses what one judges to be the best of different options, and that the will is not always active, but sometimes at rest (one does not will anything). If one adds the metaphysical principle that the will, like everything else that is movable, must be moved by some mover, and would always be active if it were self-moving—which contradicts the facts—then one reaches the conclusion that the will must be moved by something else (the intellect, the judgment, the object, etc.). The principle of essential motivation summarizes the intellectualist thesis and argumentation. On the voluntarist side, the phenomenology goes the other way and underlines the possibility of choosing against one's best option: the feeling of remorse, and the sin of the angel or of the first man (who are supposed to be fully aware of the badness of their choice) are presented as empirical proofs that one can will against one's judgment. The will is called the first mover in the soul (*primum movens in regno animae*), and even at times the first *unmoved* mover, a phrase reserved for God, and the main idea is there when one thinks of the will as an active power, able to actualize itself by itself. Most of all, there is the ethical and theological demand concerning the will's freedom, as a condition for moral responsibility and true merit and demerit, which would be undermined if the will had to follow the intellect's judgment. Presumably, the reason behind this verdict is that such judgments are not under the control of the judging mind, but the result of education, culture, and circumstance (belief is a passive rather than an active state).

When John Duns Scotus (1265–1308) began to teach and write on the topic of the will, he first adopted the Bonaventurian idea of concurrent causes (*causa concurrens*) as a middle path between Godfrey's intellectualism (the object is the efficient cause) and Henry's voluntarism (the will is the efficient cause), recognizing the force of Godfrey's arguments. Still, in his *Questions on the Metaphysics* (1997–1998), Scotus famously declared that the intellect is a natural and not a rational power as defined by Aristotle, since it can only act according to its nature. Only the will is a rational power having access to opposites (IX, q. 15). So, even if intellect and will are both partial causes of a choice, the will is the only free cause. Only the will introduces contingency in the world: God's will is the source of all contingency (*Ord.* 1.39, in Scotus 1964), but human

will is a secondary source of it (*Quod.* 18, in Scotus 1975). This shows an important asymmetry between the roles of the two faculties. Scotus refers to Anselm's doctrine of the two affections or inclinations of the will (see above), for happiness (*affectio commodi*) and for justice (*affectio iustitiae*), in order to explain its capacity to rise above a natural inclination (*Ord.* 2.6.2, nn. 49–51, in Scotus 1950), and even to choose against one's own supreme good (happiness). One can then understand, though it comes as some surprise, that when Scotus came to Paris, he joined with Henry in calling the intellect only a necessary (*sine qua non*) cause of choice, giving to the will the principal role (Dumont 2001).

One may then see Scotus as a major step, building on the work of his predecessors (Henry, maybe Olivi, Gonsalvus) and opening the path to the even more radical voluntarism of William Ockham (1284–1347). According to Ockham, the will has no natural inclination at all, but is defined as the power that can incline itself toward this or that, in the same circumstances (*Quod.* 1.16, in OT 9: 89). It sets itself its end (*Ord.* 1 prol. 10 in OT 1: 291), and even the desire for happiness is not necessary (*Ord.* 1.1.6 in OT 1: 503–507). Otherwise, Ockham's psychology of the will is quite similar to that of Scotus, where the will can go against reason's last practical judgment (*Ord.* 1 prol. 10 in OT 1: 286–287; *Quod.* 1.16 in OT 9: 88). Ockham's influence is greater concerning the structure of morality (Adams 1999). He argues that only the interior act of will has a moral value, being the only act that is directly under the control of the agent (*Ord.* 1 prol. 10, in OT 1: 292). The moral value of the exterior act just depends on that of the interior act that causes it, and it is extrinsic, the act being intrinsically morally indifferent (neutral). Ockham proves this by showing that the very same exterior act can change its value with the change of the interior act of the agent: his most famous example is that of a suicidal person who jumps in the void, and repents during the fall. The same exterior act (the fall) is first morally bad, and then indifferent, since it is not caused by the actual interior act (the remorse, and the now inefficacious will not to kill oneself), but only by the jump, which was caused by the previous interior act (*Quod.* 1.20 in OT 9; *Sent.* 3.11 in OT 6; see Scotus, *Quod.* 18, n.3 in Scotus 1975). Only an interior act can be necessarily (and intrinsically) good, and there has to be such acts; otherwise, there would be no contingently (and derivatively) morally good acts: a derivatively good act depends on a further act that is good (*Quod.* 3.14 in OT 9). Either it is intrinsically good, or it is not, and so on, ad infinitum. Ockham here presupposes that such a regress is vicious (which seems to be obvious), and that there are morally good and bad actions (which also seems obvious or certain on the basis of faith). In fact, among interior acts, only the act of loving God above all and for God's own sake is intrinsically good, the other ones being good only derivatively (*Quod.* 1.20 and 3.14 in OT 9).

To this evolution concerning the moral value of individual acts, one should add an evolution concerning the objective basis of morality in divine commands and so in divine will. Scotus admitted that only the first table of the Ten Commandments belonged to natural law, such that even God could not command otherwise. According to Ockham, all the commandments, even the first precept of the love of God, are such that God could have commanded otherwise (though in the case of the first commandment, it is such that had God commanded otherwise, no one could have obeyed). In addition to psychological and ethical voluntarism, one may then speak of a theological voluntarism that completes the importance conferred to the will by those medieval thinkers.

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21

EMOTIONS

Vesa Hirvonen

In the last few decades, emotions have been found to be a rather interesting topic, not only in analytical philosophy, but also in other philosophical traditions. To some extent, historical discussions of emotions, which include ancient and medieval approaches, have also aroused interest. Martha Nussbaum has published several monographs dealing with historical theories on emotion: *The Fragility of Goodness: Luck and Ethics in Greek Tragedy and Philosophy* (1986); *The Therapy of Desire: Theory and Practice in Hellenistic Ethics* (1994); and *Upheavals of Thought: The Intelligence of Emotions* (2001). A monograph of historical approaches to emotions was published by Richard Sorabji in 2000, under the name *Emotion and the Peace of Mind: From Stoic Agitation to Christian Temptation*. Simo Knuuttila published a history of emotions in ancient and medieval philosophy under the name *Emotions in Ancient and Medieval Philosophy* (2004). Hilge Landweer and Ursula Renz edited a large collection of articles on emotions from antiquity to the Middle Ages and modern times under the title *Klassische Emotionstheorien: Von Plato bis Wittgenstein* (2008). And Martin Pickavé and Lisa Shapiro edited a series of articles called *Emotion and Cognitive Life in Medieval and Early Modern Philosophy* (2012).

There have also been various studies concentrating on individual philosopher's theories on emotion. Alexander Brungs published a monograph on Thomas Aquinas's theory: *Metaphysik der Sinnlichkeit: das System der Passiones Animae bei Thomas von Aquin* (2002), and Vesa Hirvonen published a monograph on William Ockham's theory: *Passions in William Ockham's Philosophical Psychology* (2004). Dominik Perler published a monograph dealing with some medieval and early modern emotion theories under the title *Transformationen der Gefühle. Philosophische Emotionstheorien 1270–1670* (2011). Here, I will particularly use Knuuttila (2004) and Hirvonen (2004) as sources for this chapter; my purpose is to sketch what it was in emotions that interested medieval philosophers and the kinds of theories they had about them.

The Early Middle Ages

In the early Middle Ages, emotions particularly aroused interest because of the theological questions which dealt with them. Early medieval writers pondered what kinds of feelings, if any, Christians may have and perhaps should have. Monks and other Christians were thought to be able to rule over their volitions and behavior, thus avoiding sin. However, what about the so-called first movements toward sin and if one could not rule over them, could they be considered to be sins? These questions made theologians interested in emotional phenomena and since emotions

were linked with will, early medieval logical discussions about a person's will also aroused interest in the emotions.

Early medieval theologians and philosophers approached emotions mainly from the Neoplatonic and Stoic perspectives. Generally speaking, the attitude to emotions was negative in both of these traditions, considering them to be disturbances of the soul which should be fought against. The Stoics held emotions to be false judgments of things. The most important theological authority of that time was Augustine (354–430 CE) who lived most of his life in Roman North Africa, working since 396 as the bishop of Hippo. Being the most important Latin Church Father, Augustine's works include more than 100 treatises as well as numerous letters and sermons.

To some extent, Augustine's attitude toward emotions was more positive than that of most Neoplatonics and Stoics. He sometimes calls emotions "perturbations," but more often "affections" (*affectiones*) or "passions" (*passiones*) and these Latin terms were also used later on in the Middle Ages. The most common medieval term referring to an emotion was passion (*passio*), hinting that emotion was somehow a question of a passive state of mind. Following Cicero, Augustine uses the Stoic model which involves four types of emotions: appetite (*cupiditas*), fear (*metus, timor*), pleasure (*laetitia*), and distress (*tristitia*). This model was commonly known in the Middle Ages and was especially used in the early Middle Ages. Augustine also uses the Platonic terminology, treating concupiscence (*concupiscentia*) and anger (*ira*) as generic movements of the irrational part of the soul. In his theology of love, Augustine presents the very influential distinction between enjoying (*frui*) and using (*uti*) love; enjoying love meaning loving something as the highest good, this love being reserved only for God. All other objects should be used.

According to Augustine, emotions are states of the soul involving evaluative estimations, behavioral suggestions, and pleasant or unpleasant feelings. People can voluntarily consent to or dissent from an emotional suggestion and also repel the emotion itself. Augustine thinks that because of original sin human emotional dispositions are disturbed and emotions have to be ruled strictly by the rational part of the soul. In criticizing Stoic *apatheia*, Augustine states that emotions are common to both good and bad, but good people have them in a good way and bad people in a bad way (*City of God* 14.8); in a good way, they can even have moral value. As well as his interest in proper emotions, Augustine was also interested in the first movements. According to him, they are not free but are a person's uncontrolled reactions to things, becoming free only when they can be expelled and the person can consent to or dissent from them. A misguided emotional reaction becomes a sin when it is voluntarily controllable.

Augustine was the ruling figure in early medieval theology and most Latin theologians shared his ideas. The French theologian, Anselm of Laon (d. 1117), was one of those who developed the Augustinian theory of the first movements of the soul. According to Anselm, tempting suggestions (*suggestio*) put into the human mind by the devil or by one's own carnality as such are not sins, but penal consequences of original sin. Such a suggestion may immediately lead one to take pleasure (*delectatio*) in a forbidden thought. If one fights against the pleasure, it is a question of a venial sin, but if one lets the pleasure grow and therefore consents (*consensus*) to a sinful feeling, it is a question of mortal sin. Anselm calls unpremeditated, inevitable pleasure, pre-passion (*propassio*).

In the twelfth century, pre-passion (*propassio*) meant the initial state of an unpremeditated desire or emotional response and was used as a synonym for the more common expression, first movement. Twelfth-century theologians had different views as to whether pre-passions/first movements toward sin were sins or not. The view that even unavoidable movements toward sin were immediately venial sins became a widely accepted position, among others, thanks to Peter Lombard (c. 1095–1160) who defended it in his *Sententiae* (c. 1155), which later became a university textbook for students of theology to comment on. The same view was also held by e.g. Bonaventure (1221–1274), Albert the Great (1200–1280), and Thomas Aquinas (1225–1274).

Many of them remarked that since the first movements may be mediately voluntary, they may also be preventable.

Emotions often had an important role in mystical theology. This is especially true of the French mystic, Bernard of Clairvaux (1091–1153), who united spiritual contemplation with a personal experience of love. When considering emotions, although Bernard often used the traditional Stoic four-fold classification, he also referred to the Platonic division of the emotions into those of the concupiscible and irascible parts of the lower parts of the soul. Bernard and many other mystics considered the relationship between a Christian and God as being an ardent love-affair; some posited even special mystical emotions toward God (see the mention of Jean Gerson later in this chapter).

High Scholasticism

A new era of medieval discussions on emotion started in the twelfth and thirteenth centuries when new Latin translations of Greek and Arabic medical and philosophical works began to be studied and aroused comment. Already in the late eleventh century, Constantine the African (c. 1020–1087) compiled *Liber Pantegni* which is a text book of Hellenistic and Islamic medicine, partly a translation of the texts of the Persian physician Haly Abbas ('Alī ibn al-'Abbās al-Mağūsī', d. 994). The *Pantegni* had a strong influence on medieval medicine. In it, emotions are dealt with from the point of view of the movements of the vital spirits and heat in the body. The *Pantegni* lists six emotions which are relevant in medicine because of their physiological consequences: joy (*gaudium*), distress (*tristitia*), fear (*timor*), anger (*ira*), anxiety (*angustia*), and shame (*verecundia*). According to the *Pantegni*, joy and anger cause the vital spirits and heat to move from the heart to the extreme parts of the body. Fear and distress have the opposite effect: they cause the vital spirits and heat to withdraw into the heart.

When considering the twelfth- and thirteenth-century medieval discussions on emotion, the most influential philosophical authors were the Persian philosopher Avicenna (Ibn Sīnā, 980–1037) and Aristotle. Avicenna's *De anima* (the sixth book of his *al-Shifā*) became an important source for medieval philosophical psychology beginning in the twelfth century, and a number of Aristotle's works aroused extensive comment particularly starting in the thirteenth century.

Avicenna was especially interested in the faculties of the soul. Following Platonic terminology, he divides the faculties of the sensory soul into ones which move and ones which are apprehensive. The moving faculty is divided into the concupiscible and the irascible parts. The reactions of the concupiscible part are acts of desiring things which are taken to be pleasurable. Avicenna's examples of concupiscible acts are such as the desire for food, wealth, and sexual intercourse, which are forms of seeking pleasure. The reactions of the irascible part are acts of desiring to defeat adversaries and to repel things which are considered to be harmful. The irascible part of the sensory soul is directed toward victory and repelling antagonistic things. Avicenna's examples of these emotions are pain, sadness, fear, and anger. Pleasure and joy are said to belong to the apprehensive power. Avicenna says that sensory pleasure is the perception of fulfillment of a natural appetite. Such a perception is pleasant; pleasure is the feeling related to an awareness of something positive happening. Avicenna's view of emotions shows similarities to Aristotle's (and Plato's) compositional theory. Emotions have cognitive causes and they involve bodily feelings and behavioral suggestions. Avicenna treats the emotions themselves as motive or apprehensive acts.

In Aristotle's texts, medieval writers found several lists of emotions. In *Rhetoric* 2, Aristotle separately considers twelve emotions (most of them already discussed by Plato): anger (*orgē*), a mild temper (*praotēs*), friendly love (*philia*), hatred (*misos*), fear (*phobos*), confidence (*tharsos*), shame (*aiskhunē*), feeling kindly (*kharis*), pity (*eleos*), indignation (*nemesis*), envy (*phthonos*), and emulation

(*zēlos*). Aristotle did not present a general theory of the structure of emotion, but various emotions analyzed by him involve a cognition of what is happening, a pleasant or unpleasant feeling about the content of the evaluation, a behavioral suggestion, and/or bodily changes. According to Simo Knuuttila, Aristotle's theory shows similarities to modern compositional emotion theories and has had an influence on some of them. It is important to realize that in Aristotle's theory, emotions were considered as central constituents of the human life; the good life did not presuppose the elimination of them, but being well disposed in the human being, they were taken to be important parts of human life. Aristotle's rather positive stand on emotions was an important starting point for Aristotle's medieval commentators and followers who found good emotions to be constituents of a good life, although they often concentrated on pondering ways of controlling various emotions in order to organize life in a Christian manner.

In the first decades of the thirteenth century, a new influential taxonomical principle concerning emotions was put forward by several Aristotelian writers, including among others the French Franciscan theologian John of la Rochelle (d. 1245). In it, the emotions are classified into contrary pairs of acts of the concupiscible power and the irascible power. The contrary concupiscible emotions are interpreted as being reactions to sensually good or evil things, while the irascible emotions are interpreted as reactions to arduous things. John of la Rochelle associated the new taxonomical principle with a detailed classification of the emotions which became very influential. He simplified Avicenna's theory in treating all emotions as acts of the motive powers which are accompanied by bodily changes; none of them were treated as cognitions.

In John of la Rochelle's texts, the basic states of the concupiscible power are liking and disliking. The concupiscible emotion pairs are as follows: concupiscence (*concupiscentia*)—disgust (*fastidium*), desire (*desiderium*)—avoidance (*abominatio*), joy (*gaudium*)—pain (*dolor*), delight (*laetitia*)—sadness (*tristitia*), love (*amor*)—hate (*odium*), envy (*invidia*)—pity (*misericordia*). The basic attitudes of the irascible power are strength and weakness. The irascible emotion pairs concerning good objects are as follows: ambition (*ambitio*)—poverty of spirit (*paupertas spiritus*), hope (*spes*)—desperation (*desperatio*), arrogance (*superbia*) and dominance (*dominatio*)—humility (*humiliatio*), contempt (*contemptus*)—reverence (*reverentia*). The irascible emotions which concern evil objects are courage (*audacia*), anger (*ira*), and magnanimity (*magnanimitas*). Penitence (*paenitentia*), impatience (*impatientia*), and fear (*timor*) are somehow the opposites of courage. (For this classification in detail, see Knuuttila 2004: 234–235.)

Thomas Aquinas, a Dominican theologian and philosopher at the University of Paris, made an attempt to classify emotions with the help of the theory of natural movements in Aristotle's *Physics*. "He apparently believed that the systematic use of the principles of natural philosophy made his taxonomy of emotions more scientific than those of his predecessors. This is the most idiosyncratic part of Aquinas's theory of emotions" (Knuuttila 2004: 343). According to Aquinas, all natural beings, stones, plants, brute animals, and human beings have a natural appetite toward their natural end. Human beings and animals have a sensory appetite (*appetitus sensitivus*) toward something evaluated as being good or bad. The emotions exist there.

Aquinas's list of concupiscible (emotion) pairs are as follows: love (*amor*)—hatred (*odium*), desire (*desiderium*)—avoidance (*fuga*), pleasure/joy (*delectatio/gaudium*)—pain/sadness (*dolor/tristitia*). Love and hatred are basic orientations toward an object; desire and avoidance are actual movements toward or away from an object; joy and sadness are affective states when the object is present. Irascible emotions appear if there are obstacles to fulfilling the appetite, when the object is arduous. According to Aquinas, irascible emotions concerning good objects are as follows: hope (*spes*)—despair (*desperatio*), and concerning bad objects: courage (*audacia*)—fear (*timor*) and anger (*ira*). There is hope when the good object is likely to be achieved, and despair when not. Correspondingly, there is courage when the bad object is likely to be avoided, and fear when not. Something present which is bad and causes sadness may give rise to anger.

Aquinas thinks that emotions are cognitive: they presuppose an evaluation. He does not seem to think, however, that emotions have a proper cognitive component. Robert Pasnau seems to be right when he says that when positing this, Martha Nussbaum is wrong (see Knuuttila 2004: 253, n. 206). Aquinas treated emotions as explanatory factors of behavioral change; therefore, there is no systematic discussion in his texts of the feeling aspect of the emotions. Like Aristotle, Aquinas thought that it is wise to educate a person to have good emotional habits in order for him/her to have a good life. This education has to be done under the control of the intellect and will. The will is an immaterial appetitive faculty, the acts of which are sharply distinguished from the emotions which exist in the sensory appetite.

The Late Middle Ages

Some Franciscans, in particular, started to re-estimate which emotions were posited only in the sensory part of the human being; they may have had several reasons for questioning this. First, they did not consider the bodily connection to be necessary for emotions. For the English Franciscan, William Ockham (c. 1285–1347), it was clear that God, through his absolute power, could produce absolute qualities (such as emotions) in creatures and cause them to persist there, without anything else. Second, according to the Franciscans, the will with its phenomena seemed to remind them of the sensory appetite. That is, at least John Duns Scotus (1265–1308) and Ockham thought that the intellectual cognitions which partially cause the acts of the will concern not only universal, but also singular objects. They also thought that the will was free and not bound with rational judgments; therefore, its acts were subjective, not always being rational reactions of the person, just like sensory emotions. The “passivity” of those emotions of the will which are under direct voluntary control is, of course, very special, if one can call it “passivity” at all. One might perhaps say that it is a kind of passivity of total freedom: the will may react in any way possible, even human beings themselves do not necessarily know what arouses their wills in various situations and what their reactions will be. In any case, Scotus and Ockham located emotions both in the sensory appetite and in the will. Ockham’s theory of emotions has been investigated in detail (Hirvonen 2004); therefore, here I will mainly discuss this.

According to Ockham, the human being has two souls, the sensory soul and the rational soul, both of which have the power of appetite. The sensory soul has the sensory appetite and the rational soul has the will. Although the emotions in these appetites are qualities separated from cognition, in most cases they are, however, cognitive: they are partially caused by cognition and they cause a cognition concerning themselves so that their subject knows them. The sensory appetite is not free in its emotional reactions. The will is free in its reactions, but not always directly. Using his razor, as far as possible, Ockham identifies the emotions with appetitive acts. All the sensory emotions are acts; the will has two emotions that are not acts.

According to Ockham, the basic emotions in the sensory appetite are desire (*desiderium*)—avoidance (*fuga*) toward absent objects, pleasure (*delectatio*)—pain (*dolor*) toward present objects. One might say that in order to illustrate the sensory emotions, Ockham uses the traditional Stoic four-fold model. In addition to these traditional concupiscible emotions, Ockham sometimes adds irascible emotions such as hope (*spes*) and fear (*timor*) to the sensory appetite. However, Ockham seems to think that a more nuanced emotional life happens in the appetitive power of the intellectual soul, that is, in the will.

As previously mentioned, Scotus and Ockham also posited emotions in the will; Scotus said explicitly that there were concupiscible and irascible powers also in the will, and although Ockham did not say this as explicitly, he also considers the emotions of the will using this model. Ockham is mostly interested in the concupiscible emotions. According to him, they are in the

will: love (*amor/dilectio*)—hatred (*odium*) which can be toward either present or absent objects, desire (*desiderium*)—avoidance (*fuga*) toward an absent object, and pleasure (*delectatio*)—sadness (*tristitia*) toward a present object. Ockham made great efforts to prove that, unlike in the sensory appetite, regarding the will, one has to make a distinction between love and delight, and hatred and sadness, although this does not sound very economical. This was also the opinion of Scotus. In Ockham's model, being distinct from love and hatred, delight and sadness are not acts of the will, but only emotions (*passions*), some kind of state of mind or feelings. There are usually a number of partial causes for the act-emotions in the will, cognition of the object and the will itself being the most important ones. State-emotions, delight, and sadness are, according to Ockham, always caused by an act of the will although Scotus thought that in some cases, they could be caused without an act of the will. In any case, both were of the opinion that they were not under the direct control of the will.

In addition to the concupiscible emotions, Ockham (and Scotus) posited irascible emotions in the will, being caused partially by the other emotions, partially by certain evaluation in the intellect. It has to be noted that although these acts are in the will, they are not immediately free; that is, the will itself is not their immediate cause, but is the reason for an act that, in turn, causes them. Ockham mostly speaks about hope (*spes*) which is caused by the desire for an absent object and the evaluation that the object can be reached, whereas despair (*desperatio*) is caused by desire of an absent object and the evaluation that the object cannot be reached. Fear (*timor*) is caused by avoidance and the evaluation that the object cannot be avoided.

Ockham also applies the distinction to the pair love of friendship (*amor amicitiae*)—love of concupiscence (*amor concupiscentiae*). The first is loving something in itself and for itself; the latter is loving (wanting) something for some other reason. The third classification of love (put forward by Augustine) which Ockham uses is the one which distinguishes between loving something as the highest good (*frui*) versus using it (*uti*).

Scotus and Ockham strictly separate emotions from cognitions, but they state that they are usually partially caused by a cognition and recognized with the help of a cognition. Most emotions are appetitive acts giving behavioral suggestions but only two of them are purely affective states. Scotus and Ockham think that one can (and one should) become dispositionally apt to have certain sensory emotions and emotions of the will, reacting in the right way and therefore also behaving well. According to Ockham, the sensory appetite can be disposed to emotions with the help of good bodily qualities, and the will with the help of virtuous habits. With the help of good act-emotions of the will, a person can—and has to—control his/her inner life and behavior.

Ockham strictly separated emotions from cognitions, but his secretary, the English Franciscan Adam Wodeham (1300–1358), was of a different opinion. Since he finds it odd that God could cause love without cognition, he argues that love is a kind of cognition caused by another cognition. This is possible since according to him, love is a complex act made up of different components. Wodeham also deviated from Ockham in his opinion about embedding pleasure in love (enjoyment).

Jean Gerson (1363–1429), Chancellor of the University of Paris and a theologian, philosopher, and mystic, probably presented the longest medieval list of emotions. Under the eleven types of emotions in Aquinas's taxonomy, around 100 emotions are classified by Gerson. He thought that Aquinas's classification of emotions can be applied to the acts of the will and even to the affective acts of the spiritual apex of the soul. As a mystic, Gerson admits that people can have supernatural experiences through the spiritual senses. According to Knuuttila (2004: 284), "Gerson's idea of the parallel between sensitive, intellectual and mystical passions, exemplifies the late medieval tendency to regard affective experiences as one class of mental phenomena, which are then divided into the reactions of the various psychic powers."

Conclusion

Medieval philosophers and theologians had rather detailed theories of emotions. Most of them considered the emotions to be appetitive reactions, either inseparable or separate from cognitions, but being at least partially caused by a cognition. The emotions were thought to suggest that certain behaviors, and being ruled by the will more or less, were often thought to be constituents of a good life. A morally good life was thought to be easier if you had the support of your emotions and habits which were generated by good emotions.

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CONSCIOUSNESS

Therese Scarpelli Cory

I am aware of the apple, of seeing the apple, of myself seeing the apple; I am aware of my own awareness as mine. Were scholastic philosophers aware of these phenomena? The answer is certainly yes. The study of scholastic theories of consciousness and self-consciousness, however, is still very much a developing area of research. The last couple of decades have seen a surge of interest in medieval theories of consciousness and self-consciousness. Nevertheless, there is still a great deal of unexplored territory, particularly with respect to consciousness in the sensory arena and its integration with intellectual kinds of consciousness.

This chapter reviews the main theoretical trends in Latin scholastic thought on consciousness, focusing on thinkers that have already received some scholarly attention. (In the interests of space, I focus on Latin Scholasticism; entire chapters in their own right would be needed to address the topic as discussed among medieval Islamic philosophers or earlier medieval European thinkers; for entry points into those topics, see, e.g., Kaukua 2015; Marenbon 2019.) I will begin by explicating some idiosyncrasies of the debates that can pose difficulties for contemporary readers (see the section “Approaching the Scholastic Debates on (Self-)Consciousness”). I will then survey various thirteenth- and fourteenth-century approaches to each of the following: consciousness of extramental objects (see the section “Consciousness of Apples”), consciousness of one’s own sensory states (see the section “Consciousness of Sensory Activity”), consciousness of intellectual acts and self-consciousness (see the section “The Intellect’s Cognition of Its Acts and Itself”), phenomenality and subjectivity (see the section “Phenomenality, Subjectivity?”), and implications for physicalism (see the section “Consciousness and Physicalism”).

Approaching the Scholastic Debates on (Self-)Consciousness

Medieval discussions of (self-)consciousness have a number of peculiarities that can make them less easily accessible to readers today. Let us begin by laying out some key features that readers should keep in mind in order to secure an easier avenue of approach into medieval thinking about consciousness.

Identifying the Phenomenon at Stake

One problem for readers today is that of mapping contemporary philosophical questions about consciousness onto the phenomena that medieval authors are investigating. It seems safe to say, however, that scholastic thinkers do not treat consciousness as a single overarching phenomenon

which poses its own free-standing philosophical problem, or which can be usefully discussed in the abstract (conscious-ness). Indeed, the question, “What makes a mental state be a conscious state?” cannot be mapped onto a scholastic debate without knowing (a) what kind of mental state it is, (b) what it is about, and (c) what degree of attentiveness is at stake.

- a Scholastic authors adopt a multilayered approach to the mental, according to which an agent has different faculties enabling her to be conscious of objects under various aspects. So they often treat separately the *kind of consciousness* that can be achieved by the external senses alone or in concert with the internal senses, and that which involves the intellect. Parallel questions about consciousness can arise in both the sensory and intellectual arenas, but they are not always solved in parallel ways: many scholastic thinkers see unique theoretical possibilities opening up at the level of the intellect, which is typically held to be non-physical.
- b Scholastic treatments of consciousness are usually divided up according to *different aspects under which an object is accessible to a cognitive subject*: e.g. the accidental or essential properties of an apple; one’s own acts of seeing, imagining, or thinking about the apple; one’s habits; or one-self. Each attracts its own cluster of philosophical issues. For instance, in asking why we attend to one object rather than another, or how sense and intellect relate to extramental objects, a scholastic thinker may address questions about transitive consciousness of extramental objects, access consciousness, and wakefulness. Again, a text examining the intellect’s cognition of itself may address consciousness of mental states, self-reference, synchronic and diachronic unity of consciousness, indexicality, subjectivity, and self-consciousness.
- c The concept of *degrees of attention* also plays a significant role in the medieval debates. Many scholastic authors take for granted that attentiveness comes on a sliding scale, and that it is possible to be attending to an apple, for instance, while being somewhat conscious of the tree that it is hanging in. In other words, one can be inattentively conscious of one thing while being attentively conscious of another. (And, for some thinkers, conscious cognitive states themselves can be distinguished from non-conscious cognitive states, as we’ll see.)

Could the attentive/inattentive distinction be mapped onto the contemporary distinction between phenomenal and access consciousness? There is a reason to be cautious here. In the classic example of the phenomenal/access distinction, one driver pays careful attention to the road on the drive home from work (phenomenal consciousness), while another is so intent on a philosophical problem that she arrives home without any memory of steering the car, making turns, and so on (access consciousness). Such experiences are certainly among those envisioned by the medieval attentive/inattentive distinction. But the contemporary phenomenal/access distinction goes beyond merely differentiating two sorts of experiences. It also suggests a certain characterization of *what differentiates them*: namely, that in phenomenal consciousness, there is a “what it is like to control the car,” whereas access consciousness lacks the “what it is like”—but it is not clear that medieval thinkers would accept this way of characterizing the distinction. Moreover, the scholastic attentive/inattentive distinction is meant to cover a much broader range of phenomena, including degrees of attentiveness. Finally, some scholastic thinkers arguably account for certain kinds of access consciousness in terms of non-conscious, rather than inattentively conscious cognitive relations.

In approaching a scholastic text, then, one must get clear on the phenomenon that the author is addressing. Is it my visual focusing on this apple? A vague consciousness of the greenness of the tree in which the apple is hanging? Some sort of inattentive consciousness of myself as a subject focusing on the apple? An attentive focusing on my act of seeing the apple? It is only after tracking down and assembling an author’s various accounts of these various phenomena that one can begin to draw more general conclusions about the author’s “theory of consciousness.”

Medieval Discussions of (Self-)Consciousness: Where to Look?

Another difficulty for readers today is that of locating the (often surprising) contexts in which medieval thinkers broach topics relevant to theorizing about consciousness. Early in the thirteenth century, consciousness and self-consciousness are typically treated in connection with arguments for the soul's immateriality. Later, these topics became connected with questions such as the following: whether the intellect can cognize more than one thing at once; whether the soul cognizes itself "by its essence or by its act"; whether an act of sensing is sensed by the sense performing that act, or by another sense; whether every cognition is a cognition of itself; whether the agent intellect is always in act; whether the possible or agent intellects understand themselves; whether direct and reflex acts are identical (Putallaz 1991a; Zupko 2007; Jeschke 2011; Cory 2014; Perler and Schierbaum 2014).

The commentary genre also provides a cadre of standard *loci* for discussing consciousness or self-consciousness. For instance, in commentaries on the *Sentences*, discussions of self-consciousness might surface in connection with the mind as image of the Trinity (book 1); angelic or human cognition (book 2); awareness of one's own moral state (book 3). Commentaries on Aristotle provide a number of important *loci* for discussion: the common sense (*DA* 3.2); the intellect's self-understanding (*DA* 3.4); a moral agent's necessary awareness of himself as the one acting (*Eth.* 3.1); the virtuous person's awareness of and pleasure in acting (*Eth.* 9.9); or the First Intellect as self-thinking thought (*Met.* 12.7, 12.9). And in commenting on the *Liber de causis*, scholastic thinkers might address the metaphysical properties of entities capable of fully reflexive activities (props. 7 and 15).

As is typical of scholastic philosophizing, some of the most nuanced claims are made on the fly, as it were, in entirely unexpected contexts. Consciousness or self-consciousness might be treated in connection with the materiality of sense organs, attention and distraction, memory, dreaming, the perpetual activity of the agent intellect, certitude of being in a salvific state of grace, skeptical worries, an animal's ability to judge an object as harmful or beneficial to itself, the human and divine self-knowledge of Christ, and Trinitarian theology. Privacy, subjective perspective, and interiority may be dealt with in discussing whether angels or demons can read each other's and human thoughts, or the Averroist controversy over whether all humans share a single intellect.

Terminology

Finally, Scholastic terminology can be highly misleading for readers investigating theories of consciousness. "Consciousness" (*conscientia*) has a largely moral rather than psychological connotation in scholastic authors, who use instead terms like "cognition," "attention," or "consideration" (see the section "Consciousness of Sensory Activity"). Similarly, where contemporary discussions of consciousness make liberal use of the first-person pronoun, scholastic thinkers may speak rather of "soul," "intellect," or "oneself." Nevertheless, scholastic thinkers were not unaware of first-personal and subjective phenomena, as we shall see.

Moreover, even apparently familiar scholastic terms warrant caution. For example, contemporary philosophers distinguish reflexivity theories (which accord to mental states an intrinsic self-reference, usually assumed to be inattentive) from theories of reflection (according to which a mental state refers to *other* same-order or higher-order mental states as an attentive object). But the language of "reflecting upon" or "returning to" oneself is deployed quite loosely in scholastic texts: e.g. Ockham's "reflex act" is actually a second-order act.

Again, some scholastic thinkers use the term "object" loosely to refer to what causes or intentionally specifies a certain mental state. But to say that one's visual act is the "object" of cognition

is not necessarily to imply that the agent is *noticing* or *paying attention* to her visual act, or even that a higher-order act is involved. For similar reasons, phrases like “perceiving one’s act” must be evaluated carefully by different authors.

Consciousness in Scholasticism

Consciousness of Apples

A mirror can only reflect an apple. But I am conscious of an apple. Why? What is the difference between a mirror’s way of relating to the apple and the mind’s?

Scholastic texts address such questions in terms of the psychology of *cognition*. So one might erroneously conclude that they were uninterested in consciousness. But the opposite is true: they take cognition to be philosophically interesting because it typically implies a *conscious* relationship to objects, such that “cognizing” is sometimes used interchangeably with terms such as “attending,” “intending,” “considering,” or “cogitating.”

Nevertheless, it would equally be a mistake to assume that for scholastic thinkers, *all* apple-cognizing implies being conscious of an apple in a perfectly attentive way. They recognize that the mind can be related to some objects in non-conscious, subliminal, or semi-conscious ways. For instance, objects are registered on the edge of a field of vision, pain makes it difficult to focus on study, a distracted reader sees words on a page without registering them—or conversely, a focused reader fails to hear spoken words addressed to her, which she can then nevertheless recall. Peter Auriol (d. 1322), for instance, describes what seems to be a kind of access consciousness, as when someone rattles off a psalm without thinking, or plays a zither in a distracted way (Noone 2014).

Scholastic thinkers adopted various strategies for explaining degrees of attentiveness within various conscious states. Such discussions often center on the question of whether a cognitive power can perform many acts or be informed by many “species” (representations) at once. For Aquinas, for instance, cognitive powers can only perform one act, informed by one species, cognizing one “whole” at a time. But his broad construal of “whole” enables him to distinguish inattentively cognized parts from attentively cognized parts, within a single act (Cory 2014: 138–42).

Olivi likewise holds that multiple objects can be actually grasped at once only if they fall under a single *aspectus* or gaze, perhaps thinking of the example of objects seen together within a field of vision. But the possibility of “gazing” itself further depends on the soul’s already being directed toward its sensory environment, so as to register the presence of a sensory object, before it can attend to it voluntarily (Silva and Toivanen 2010: 276–277). Toivanen (2009: 219–226) has argued that this attentiveness is effected by a higher “common sense” (or further up the cognitive chain, the intellect in humans) directing itself toward the activities of the senses in a higher-order way, an interpretation that perhaps nudges Olivi in the direction of Ockham (see below).

Other scholastics, however, allow for a cognitive power to perform multiple acts and/or receive multiple species concurrently, with the soul bestowing its free-floating attention selectively. John Duns Scotus (d. 1308), for example, asserts that the senses are constantly receiving species (representations) from surrounding objects that do not trigger corresponding sensory acts unless the sense “brings itself to bear more intensely” on that object. He seems to be describing an entirely non-conscious cognitive state (Cross 2014: 22–27, suggesting similarities to access consciousness). Scotus also seems to be explicating a liminal or inattentive consciousness when he holds that although the soul can only have one “perfect cogitation” at a time, this can be accompanied by many simultaneous “imperfect cogitations” unless the former is strong enough to exclude the latter entirely (Cross 2014: 57–59).

In these theories, consciousness seems to be a primitive property of certain kinds of cognitive relations to objects. But William of Ockham (d. 1348) breaks with this trend to defend a

higher-order account of consciousness: even if my visual powers are activated by the apple, I am not *conscious* of it unless my act of seeing the apple is itself the object of a higher-order act. (We will see that he holds the same view at the intellectual level.) Such a higher-order view has been attributed to Aquinas (Stock 1958, but disputed by Pasnau 2001: 105), and Scotus (disputed by Cross 2014: 51).

Consciousness of Sensory Activity

In addition to being conscious of the *apple*, it seems that I am also conscious of *seeing* the apple. Scholastic thinkers typically explained consciousness of sensory activity in higher-order terms, motivated by a widely accepted view traceable to Avicenna's (Ibn Sīnā, d. 1037) *Liber de anima* V.2 and the anonymous *Liber de causis*, prop. 7: namely, physical sense organs (e.g. the eye) cannot reflexively grasp their own acts. Thus, I can be conscious of my seeing, hearing, or smelling only by a higher-order power, usually identified with the so-called "common sense" from Aristotle's *DA* 3.2, which senses the activities of the five external senses. (As an added complication, however, some scholastic thinkers also hold that the intellect can directly grasp the acts of lower cognitive powers, including the external senses.)

Little is known about the role of common sense in scholastic theories of consciousness, which has been largely neglected in recent studies (except for Toivanen 2013). In particular, the common sense's role as a higher-order perceiver of sensory acts may not be as straightforward as it might seem. The common sense also performs tasks that imply acquaintance with sensory *objects*: e.g. differentiating between red and sweet. So are sensory acts the *perceptual objects* of common sense in the manner in which apples are the perceptual objects of sight? Or does common sense rather perceive *apples as objects of seeing*, thereby incidentally providing consciousness also of the act of seeing (in which case questions immediately arise concerning the relation between the common sense's and external senses' consciousness of apples)? To answer these questions, more research is needed. What is known so far is that Olivi (Toivanen 2013: 276), and probably also Scotus (see below) adopt the second option. Interestingly, Chatton explicitly raises parallel questions in connection with Ockham's higher-order theory of intellectual consciousness (Brower-Toland 2012: 10–13).

Other complications can arise as well, as exemplified by Aquinas and Scotus, both defenders of a higher-order "common sense" account of how we are conscious of our sensory acts. In his earliest writings (e.g. *Sent.* III.23.1.2, ad 3), Aquinas rejects the reflexivity of the senses in favor of the common sense as the power that senses sensory acts. But he then appears to change his mind, arguing for the "incomplete" reflexivity of the senses, inasmuch as they can sense their acts, but not themselves (*De veritate* 1.9 and 10.9). Subsequently, he returns to a higher-order common sense account, yet later supplements it with some sort of sense-awareness of sensing (*Commentary on De anima* 2.26). In the latter, Aquinas seems to be influenced by Averroes's *Long Commentary on De anima* 2.136, which argues to avoid infinite regress that since the proper function of the eye is to see color, and the eye becomes colored in seeing color, therefore in seeing the color of an apple, the eye also secondarily sees its own internal color (see Cory 2017 and compare the intrinsic-reflexivity account in the section "The Intellect's Inattentive Consciousness of Itself and Its Acts").

Scotus's early *Quaestiones super De anima* 9 describes a spurious reflexivity whereby the common sense apprehends not only the acts of the lower senses, but *its own* act. He explains that the common sense perceives apples by means of a species (representation) that it receives from the external senses, and that becomes imprinted with the common sense's own apple-perceiving act. The species then "flows back down" into the external senses, whence the common sense once again receives it, but this time including the imprint of its own (previous) act. This curious cycle does not, of course, constitute genuine reflexivity, but is akin to inspecting one's bloodshot eye in a mirror. Nevertheless, the analysis provides a clue to the relation between higher-order and

lower-order acts in general (for the early Scotus at least): i.e. a higher-order power's representation of an apple *includes a representation of the lower-order power's act of seeing the apple*. In receiving this representation, a higher-order power can simultaneously perceive both the object of the lower-order act and the lower-order act itself.

The Intellect's Cognition of Its Acts and Itself

Turning to the intellect, we cross into the territory that has attracted most recent explorations into medieval theories of consciousness. For scholastic writers, the question of how I am conscious of *my intellectual acts about apples* is closely linked with the question of self-consciousness. Indeed, in the background of the debate is an overarching question about which is prior, logically if not temporally: cognition of *myself*, or cognition of *my acts*? Here, if anywhere, arise issues concerning self-reference—i.e. ascribing states to myself in the first person—or immunity to error through misidentification—i.e. the apparent impossibility of misidentifying myself as anything other than “I.” Sometimes, however, one has to reconstruct which aspects of a theory are meant to address them (Cory 2012, 2014; Kaukua 2015). In a few cases, interestingly, scholastic thinkers explicitly accused opponents of being unable to account for these phenomena (Putallaz 1991a; Brower-Toland 2013; Schierbaum 2018).

The shifting landscape of scholastic thought on the intellect's cognition of itself and its acts can be most easily surveyed by identifying different scholastic approaches to three main cognitive conditions that the intellect can be in with respect to itself or its acts (discussed in the following sections). First, there is the intellect's primitive condition prior to all conscious experience, a state that some thinkers designated as a non-conscious self-knowing, and that others construed in a dispositional way. Second, some thinkers held that concomitant with its attentive consciousness to extramental objects, the intellect is inattentively conscious of its acts or itself. Third, it was generally accepted that the intellect is sometimes attentively conscious of its acts or itself, as when I am thinking about my thoughts. In constructing a complete theory of “how the intellect cognizes itself and its acts,” a scholastic thinker will bundle together accounts for each kind of (non-) consciousness that he decides to admit into his system, and defenders can be found for nearly every possible combination of accounts. One trend to note, however, is that non-conscious self-knowing and inattentive self-consciousness are eventually seen as competing for the same conceptual territory. From the late thirteenth century onward, there is a drift away from the former toward the latter.

The Soul's Primitive Cognitive State with Respect to Itself

One problem that exercised scholastic thinkers was the following: before the soul becomes conscious of itself or anything else, does it have any cognitive relationship to itself? In other words, how is the soul situated by nature, i.e. primitively, with respect to self-cognition? There are two main solutions:

PC 1: Theories of non-conscious self-knowing, according to which the soul's primitive state is one of perpetual self-knowing (William of Auvergne, Jean de la Rochelle, Albert the Great, Thierry of Freiburg).

PC 2: Primitive readiness theories, which grant to the soul merely a primitive disposition for self-consciousness (Bonaventure, Aquinas) or a primitive inner-directed stance (Olivi).

Non-conscious self-knowing. The scholastic debate about non-conscious self-knowing was apparently triggered by sources such as Augustine and Avicenna, who maintained that attentive consciousness

of myself or my acts presupposes some prior acquaintance with myself. Augustine demands, for instance, how I could know that the Delphic command “Know thyself” applies to me, unless I already knew myself (*De Trinitate* 10.9.12). One of his answers, often cited by his medieval followers, distinguishes a perpetual self-knowing from an intermittent attention to itself: “The mind always remembers, understands, and loves itself, although it does not always think of itself as distinct from other things” (14.6.9).

Avicenna similarly points out that in order to use the indexical “I” correctly in propositions such as “I sensed,” “I cognized,” or “I did,” I must *already* know that there is just one subject of these diverse conscious experiences, prior to those experiences and indeed prior to any conscious experience at all, including, therefore, conscious experiences of myself (Kaukua 2007, 2015; Black 2008: 23). Avicenna’s reasoning seems to be premised on the worry (familiar from contemporary debates about self-reference) that an attentive conscious experience of myself is insufficient to account for the indexical and unitary properties of “I.” After all, when I notice myself thinking about or seeing apples, why should I recognize this subject as *myself*—and indeed, as the *same* subject that is both thinking and seeing?

Avicenna’s solution is that the soul is primitively acquainted with itself prior to any conscious experience whatsoever; i.e. it is always knowing itself *just by being itself*. This primitive self-acquaintance is non-conscious, and it is not attributable to any particular cognitive faculty; indeed, Avicenna identifies it with the soul’s very being. Nevertheless, he describes it in cognitive terms as an “awareness” of oneself, leading some interpreters to conclude that he is describing a self-cognitive state that the soul or self *is* rather than *has* (Kaukua 2007: 103–132; Black 2008: 66). Functionally speaking, this state enables me to interact intellectually with the world from a unified first-person perspective and to use the first-person indexical correctly (“I think the apple was red”) without pausing to introspect. It thus behaves like an innate access *self*-consciousness, similar to the access consciousness of the road that enables me to drive the car home without paying attention.

Avicenna’s Latin readers found a dramatic illustration of this primitive self-acquaintance in his famous “Flying Man” thought-experiment, which describes a man created as an adult in a state of total sensory deprivation, floating in air and with his body-parts spread apart so as to preclude his sensing his own body. Avicenna thinks it is evident that this poor creature would at least have self-consciousness: “He would affirm the being of his essence; nor would he hesitate to affirm that he exists,” despite lacking beliefs concerning the existence of a body. Thus, what the flying man experiences, so as to ground the belief that he exists, is a soul distinct from the body (Hasse 2000; Black 2008; Lopez-Farjeat 2012; Kaukua 2015). Now, the thought-experiment describes an attentive self-consciousness (Black 2008) and was probably intended merely to show the soul’s independence from the body (Hasse 2007: 80–92). Nevertheless, in eliciting the intuition that the flying man would *of course* be conscious of himself despite sensory deprivation, the thought-experiment reinforces vividly the views Avicenna suggests elsewhere: self-knowing is so basic to the immaterial soul that it must always be knowing itself *non-consciously*, independent of, and prior to, all conscious experience.

William of Auvergne (d. 1249), for example, argues that the soul cannot be ignorant of itself or anything that pertains to itself, even its own incorporeal nature. His argument turns on the claim that *x*’s mental presence suffices for cognizing *x*. An apple’s vicarious presence through a species (i.e. a representation) is sufficient for cognizing the apple. But the soul already *is* itself! All the more so, then, does it cognize itself “by itself” or “by the presence of its truth.” William does not ask, however, what constitutes mental presence, whether all modes of presence suffice for cognition, or what kind of cognition is at stake here. Indeed, for William, the soul’s self-knowing hardly needs justification. Rather, what needs to be explained is why we do not always *consciously* understand ourselves; distraction by extramental objects is, of course, the culprit (Cory 2014: 30–33).

Albert the Great (d. 1280) reframed non-conscious self-knowing more precisely as an indiscernible perpetually running *cognitive activity*, the perpetual inner “shining” of the soul’s intellectual “light,” which has the function of illuminating or abstracting the natures of things. Even when not illuminating *something*, the light continues to shine, like the sun’s rays passing through space without striking anything. This intramental activity is “indeterminate,” by which Albert seems to mean that it is non-intentional and non-conscious—it is not a consciousness of oneself, or of anything at all (Cory 2014: 33–38). This notion reappears later in Thierry of Freiberg (d. 1310) (see Perler and Schierbaum 2014: 365–375).

Primitive readiness theories. For other scholastic theorists, however, the soul’s primitive cognitive state vis-à-vis itself is merely one of innate readiness for self-consciousness. For instance, Aquinas refuses to accord to the human soul anything more robust than a natural “habitual cognition” or *disposition* enabling it to “proceed to an act of cognizing itself” (Putallaz 1991a; Cory 2014, although some have incorrectly read this as a non-conscious activity). Again, Olivi ascribes to the soul a kind of primitive inner-directedness that enables it to register instantly what happens within itself—a sort of permanent cognitive *stance*, rather than a kind of activity (Brower-Toland 2013; and see the section “The Intellect’s Inattentive Consciousness of Itself and Its Acts”), complementing the outer-directedness that enables the soul to register sensory stimuli (see the section “Consciousness of Apples”).

Aquinas’s attacks on theories of non-conscious self-knowing left an important mark on the scholastic debate. In particular, he was responsible for a widely adopted framing of the debate as a dispute between two claims: namely, the claim that the intellect cognizes itself “by its essence or by itself” (indicating a non-conscious intellectual activity independent of conscious experience), and the claim that the intellect cognizes itself “by its act” or “by a species” (i.e. dependent on its being activated in conscious experience). His arguments against cognizing oneself “by one’s essence” were perhaps more successful than are often realized, accepted even by some of his staunch critics such as Matthew of Aquasparta (d. 1302) (see Putallaz 1991a: 50–72). Thereafter, scholastic attention shifted toward evaluating how the intellect is inattentively or attentively *conscious* of itself or its acts, and the notion of an innate *non-conscious* cognitive activity largely fell by the wayside.

The Intellect’s Inattentive Consciousness of Itself and Its Acts

Non-conscious self-knowing lies outside the framework of (and is prior to) all conscious experience. But for some scholastic thinkers, there is also an inattentive self-consciousness (or inattentive consciousness of one’s acts) that is an integral part of conscious experience, and which precedes any attentive thinking about oneself or one’s acts. For these thinkers, the mere fact of thinking about apples is sufficient to provide inattentive consciousness of the intellect and its acts. In other words, whenever the intellect is acting, it is already registering its own cognitive activity (and perhaps also itself as an agent) in some inattentive way, before it has even had a chance to attend to itself.

I describe the three theory-groups here in terms of inattentive consciousness of one’s *acts*, noting that for some thinkers, the latter also implies consciousness of *oneself*:

IC 1: Intrinsic-reflexivity theories, in which the internal structure of the intellectual act guarantees my being inattentively conscious of it in the performance of it (Albert, Aquinas *per* Cory 2014).

IC 2: Inner-acquaintance theories, for which the intellect’s direct presence to its act guarantees inattentive consciousness of that act (William of Auvergne, Olivi *per* Brower-Toland 2013, Chatton, possibly Buridan).

IC 3: Higher-order theories, in which first-order acts automatically produce second-order acts, guaranteeing that when I know an apple, I know that I know it (Aquinas *per* Putallaz 1991b; Olivi *per* Martin 2007; Rode 2010).

Intrinsic-reflexivity theories. One important source for scholastic theories of self-consciousness was Aristotle's statement that the intellect understands itself "like other things" (*DA* 3.4, 430a2), which was interpreted by some commentators to mean that intellectual self-consciousness is not only *dependent* on cognition of extramental things, but indeed *intrinsic to the structure of an intellectual act*. This "intrinsic-reflexivity theory" derives from an identity theory of cognition, in which to cognize *O* is in some sense to become *O*—so that in cognizing *O*, the intellect also cognizes itself.

Albert, for instance, describes an undifferentiated and unfocused self-consciousness intrinsic to all thoughts, according to which the mind "understands itself with all intelligibles as their subject, not distinct from them" (Cory 2014: 35–36). An interpretation of Aquinas as an intrinsic-reflexivity theorist has been developed at length in Cory (2014: 134–173), arguing that Aquinas sees self-consciousness as primitive to the metaphysical structure of intellectual understanding. As a potency for thought, the human intellect has no form or structure of its own, and thus knows itself "by its act" or "by a species" in the sense that acts, formed by species (representations), are what gives the intellect the "shape" and actuality that manifest it to itself. This consciousness of the intellectual act implies self-consciousness, since agents are cognized through their acts: e.g. one does not experience "running" and infer a runner, but rather sees a runner running. (Aquinas's references to self-consciousness "by its act" or "by a species," however, have also been read as evidence for a higher-order theory; see below and the section "The Intellect's Attentive Consciousness of Itself and Its Acts".)

Inner-acquaintance theories. Like intrinsic-reflexivity theories, inner-acquaintance theories hold that consciousness of intellectual activity and even self-consciousness are primitive to the intellectual act. But they place explanatory weight, not on the act's *internal metaphysical structure*, but on the soul's being present to whatever happens within itself. An inner-acquaintance theory appears already in William of Auvergne, who argues that the soul cannot fail to be conscious of its mental states, e.g. "knowing, doubts, opinions, joys, sorrows, fears, and courage." It is not clear, however, whether consciousness of one's mental states also includes an experience of, or merely grounds an inference to, the soul-self. William merely states that to be aware of such mental acts while denying the existence of the soul-agent is like asserting the existence of curliness while denying the existence of hair.

Perhaps the best-known medieval proponent of an inner-acquaintance view is Olivi, who describes in detail an experiential and "quasi-tactile" consciousness of all one's mental acts and of oneself ("that it exists, lives, thinks, wills, sees, hears, and moves the body"). He seems to conceive of the soul as a kind of matrix within which reverberating acts are immediately although inattentively felt. The reason that the soul can register acts before attending to them lies in Olivi's version of a primitive readiness theory: namely, the soul is primitively, permanently directed toward itself (see the section "The Soul's Primitive Cognitive State with Respect to Itself"; Silva and Toivanen 2010; Brower-Toland 2013)—just as its directedness toward the sensory world enables it to register sensory stimuli before it attends to them (see the section "Consciousness of Apples"). For Olivi, then, any conscious act depends on the soul's being poised to register new acts and objects, like a radio antennae poised to pick up a signal even when the station is not broadcasting.

Chatton likewise argues that "all that is required" for consciousness of one's first-order thought of a rock is that "the thought be received in the mind." This consciousness of one's thought is the cause of the judgment "I am thinking about a rock," linking consciousness of intellectual states to *self-consciousness* (see Brower-Toland 2012: 14).

Higher-order theories. I will discuss higher-order theories of *attentive* consciousness of one's acts/oneself in more detail in the section "The Intellect's Attentive Consciousness of Itself and Its Acts." But more controversially, some scholastic thinkers have been read as proposing a higher-order account of *inattentive* consciousness. On these interpretations, a first-order act is automatically tracked by a second-order monitoring act, so that in thinking about apples, I automatically

also perceive my act of thinking about apples. While my attention is directed toward apples, any consciousness of my own thinking can only be inattentive. Nevertheless, this inattentive consciousness enables me simultaneously not only to think about apples, but to know that I am thinking about apples. Putallaz (1991b: 148–208) attributes such a view to Aquinas, referring to the second-order act as “reflexion in the strict sense”; against which see Cory (2014: 163–173, 195–198). Such a view is attributed to Olivi by Martin (2007) and Rode (2010); against which see Brower-Toland (2013: 153–162).

The Intellect’s Attentive Consciousness of Itself and Its Acts

Whether or not the intellect has non-conscious or inattentively conscious self-cognition, a further question remains: under what conditions does it become *attentively conscious* of its own acts or itself? Scholastic answers can be grouped into three categories (again, described here in terms of attentive consciousness of intellectual acts, noting that for some thinkers, the latter also implies consciousness of oneself).

AC 1: Inward-turn theories, for which attentive consciousness of intellectual acts results from an introspective, voluntary inward “turn” of attention (William of Auvergne, Jean de la Rochelle, Bonaventure, Albert, Matthew of Aquasparta, Chatton, and Aquinas *per* Cory 2014).

AC 2: Higher-order theories, for which attentive consciousness of intellectual acts results from their becoming the object of a higher-order act, sometimes called a “reflex act” (Aquinas *per* Pasnau 2001, Olivi, Scotus, Ockham).

AC 3: Empiricist theories, which take to heart the impossibility of the senses perceiving intellectual acts or the intellect itself, and thus subject intramental realities to the same conceptualizing process as any other object that is known indirectly without ever being sensed (the early Scotus concerning the soul/intellect, Aquinas *per* his successors, and to a certain extent Buridan).

The boundary between the inward-turn and higher-order theories is sometimes fuzzy, especially in earlier thinkers, because both hold that one becomes attentively conscious of intellectual acts by directing oneself mentally toward them. The difference between the two theories, I take it, is that inward-turn theories propose a *merely volitional* condition for “turning” attentively toward one’s own acts, i.e. the voluntary directing of attention inward—whereas higher-order theories additionally propose a *cognitive* condition, i.e. the formation of a distinct higher-order cognitive act.

Inward-turn theories. On this view, in order for the intellect to become attentively conscious of itself or its acts, it is sufficient that it merely “turn inward.” This “turn,” construed as a voluntary redirection of attention, causes an experiential attentive consciousness of one’s acts or oneself, not an abstract conceptualization. Bonaventure (d. 1274) exemplifies one version of this theory, which holds that *nothing other than* an act of the will is needed in order to think about oneself and one’s acts. Matthew of Aquasparta, however, represents an alternate version, according to which the intellect first needs to be activated in cognizing other things, before it is able to turn its attention inward. Once it is activated in relation to some extramental object through a species, the intellect and its acts immediately and directly appear within its internal “view” (*conspectus*). This internal, apparently inattentive, self-appearing enables the soul subsequently to “return” to itself, by which Matthew seems to mean that it turns its attention inward (Putallaz 1991a: 13–84). On one reading, Aquinas holds a similar inward-turn theory, according to which becoming attentively conscious is merely a matter of attending to what is already inattentively manifested through the intrinsic reflexivity of the act of thinking about apples—namely, oneself-in-the-act-of-thinking (Cory 2014: 163–173).

Higher-order theories and the regress problem. Higher-order theories account for attentive consciousness of one's intellectual acts by means of a second-order act that is directed at the first-order act. A higher-order theory of attentive self-consciousness has been attributed to Aquinas (Pasnau 2002: 346–347); Olivi (Brower-Toland 2013; Perler and Schierbaum 2014: 132); and Scotus (Cross 2014: 52).

Scotus, interestingly, emphasizes the immediacy and intuitivity of this higher-order experience of one's intellectual acts; yet, it is not until his later writings that he also asserts that the intellect can also experience itself or the soul. He clearly states that I introspectively experience these acts as *mine*, and their actor as *myself*, although without explicitly discussing what grounds this self-ascription (Cross 2014: 52–57).

Worries about self-reference and other well-known challenges to higher-order theories were explicitly raised later in the Ockham–Chatton debate. For Ockham, I am conscious of apples *and* conscious of perceiving apples, just in case I am performing a second-order act (“the reflex act”) whose object is the first-order act directed at apples (“the direct act”). The reflex act thus accounts not only for consciousness of objects (see the section “Consciousness of Apples”), but also for consciousness of the direct act.

For Ockham, reflex acts are triggered whenever there is a direct act, so that normally speaking, one is (presumably inattentively) conscious of one's occurrent act. But this view leaves him open to infinite regress concerns, as Chatton objected. To block the regress, Ockham holds that due to the intellect's limited attention span, it cannot keep piling on reflex acts indefinitely, but normally becomes exhausted with the first reflex act (see Michon 2007; Brower-Toland 2012, 2014; Schierbaum 2018).

Ockham also faces objections concerning indexicality and self-reference. Since he denies that the intellect can experience *itself*, he seems shorn of resources for explaining why the intellect ascribes first-order acts to *itself*, let alone justifying anything like immunity to error through misidentification. Against him, Chatton argues that indexicality cannot be a primitive feature of a higher-order attentive consciousness of one's acts. Rather, it must be a feature of a prior same-order inner acquaintance with one's acts. Ockham, however, seems to hold that indexicality can be reduced to other, primitive properties of direct acts (Schierbaum 2014, 2018).

Empiricist theories. Toward the end of the thirteenth century, the “Aristotelian” approach to self-consciousness began to be associated with the claim that since intramental realities cannot be the objects of empirical sensory experience, one cannot experience them at all, but only understands them indirectly through constructed imaginative representations or inferences from their effects, in the manner in which one understands the long-vanished Colossus of Rhodes or the existence of God (see Matthew of Aquasparta's critique of this view, Putallaz 1991a: 35). Empiricist theories thus do not so much attempt to account for attentive self-consciousness. Rather, they tend to deny its possibility, in favor of an abstractive or inferential conceptual knowledge of the soul (although some saw the theory as leaving room at least for an experiential consciousness of one's acts).

In his early writings, Scotus likewise appealed to the intellect's reliance on phantasms in order to explain why the soul can only infer its own existence and the existence of its intellectual power, Hume-style (Michon 2007: 126–127; Cross 2014: 52–57). Later, however, Scotus allowed that not only intellectual acts, but the soul itself can be objects of a higher-order act. The Dominican defender of Aquinas, Thomas Sutton (d. 1315), similarly argued that the soul can come to cognize itself only by inference (Putallaz 1991a: 191–257; Perler and Schierbaum 2014: 219–226). Perhaps because of this misinterpretation by his own disciples, and because of his defense of an “Aristotelian” view of self-consciousness, Thomas Aquinas was also assumed to defend an empiricist theory. Consequently, he was excoriated by his Franciscan critics for failing—as they thought—to

accommodate direct self-consciousness (Putallaz 1991a: 34–36), a critique that persists in the literature today (e.g. Martin 2007; against this view, Cory 2014: 92–114).

Complicating this picture of empiricist theories in scholasticism is the fact that scholastic thinkers of all stripes made room for acts of conceptualizing the soul's nature through discursive reasoning, without intending thereby to deny the possibility of experiential modes of self-consciousness or consciousness of one's own mental states. For instance, like Sutton, John Buridan (d. 1361) argues that one can only conceptualize one's own intellect through reasoning. Yet, recent studies have suggested that Buridan presupposes that all mental activity carries along with it an inattentive consciousness of one's *mental states* (Perler and Schierbaum 2014: 489–497), or even of the intellect itself (Brower-Toland 2017).

Phenomenality, Subjectivity?

Some commentators have argued that phenomenality, or the “what it is like” to be in a particular conscious state, is a concept foreign to scholastic thinkers, who are more interested in analyzing the metaphysical structure of conscious acts (King 2007). And it is quite true that scholastic thinkers do not reflect on the “what it is like” of experience as a self-standing philosophical problem with implications for the mind-body problem.

Nevertheless, scholastic thinkers were certainly aware of—and some even attempted explicitly to account for—the phenomenal properties of conscious acts. The question of whether damned souls are tormented by physical fire provides an opportunity for some authors to distinguish the phenomenal feel of being painfully burned, from the physical consuming of flesh by fire (Toivanen 2009: 102–103; Cross 2014: 40–42). Another intriguing case is that of Peter Auriol, who describes objects as having *esse apparens* or “appearing being” in the mind, possibly referring to the “what it is like” to experience them.

It is also now beyond dispute that some scholastic thinkers explicitly address phenomena associated with subjectivity, including, e.g. indexicality and self-reference (Brower-Toland 2012, 2013; Cory 2014: 199–214; Cross 2014: 52–57; Schierbaum 2018); diachronically unified consciousness (Cory 2012, 2014); privacy of perspective (Cory 2016), proprioception, or awareness of one's bodily positioning (Yrönsuuri 2008), and the certitude of judgments such as “that I exist” or “that I think” (Boulnois 2007). Animal subjectivity has been the subject of some recent interesting work (Toivanen 2009, 2013; López-Farjeat 2012). There is, however, an ongoing debate about the extent to which different thinkers are alive to notions of subjectivity; see, e.g., Marenbon (2019).

Consciousness and Physicalism

As we saw earlier, scholastic thinkers generally denied the possibility of reflexivity or same-order reflection for physical cognitive faculties (see Zupko 2007: 89–90), with the possible exception of Aquinas. Aquinas's tentative and sporadic defenses of some sort of sensory reflexivity, however, stem from the conviction that there is something not-fully-physical about *sensation*, not from a rejection of the principle that something fully physical cannot be reflexive. Indeed, a number of scholastic thinkers conversely viewed full reflexivity and/or self-knowledge as evidence for the intellect's immateriality, though their arguments remain to be studied in depth.¹

Note

1 I would like to thank Susan Brower-Toland and John Schwenkler for their helpful critiques.

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PART V

Cognition

23

INTERNAL SENSES

Deborah Black

Despite their privileging of the intellect as the only uniquely human cognitive faculty, medieval philosophers accorded a cluster of faculties located in the brain, known as the “internal senses,” with a wide variety of cognitive tasks. These internal sense faculties were united by their common concern with sensory images, in virtue of which they account for most of our everyday cognitive operations, such as our ability to remember, our capacity to integrate the diverse perceptions of our individual senses, and the creative operations of our imaginations. Moreover, since most of the capacities assigned to the internal senses are those that humans share in some form with non-human animals, discussions of the internal senses also represent medieval philosophers’ attempts to explain animal cognition and to explore the extent to which animals possess perceptual abilities akin to those of human beings.

Origins and Background

The internal senses represent an attempt to unify and systematize the various operations which Aristotle attributed to imagination (*phantasia*).¹ The Aristotelian roots of the internal senses are complicated, however, by the transmission history of Aristotle’s short physical treatises, the *Parva naturalia*, which contain more detailed expositions of Aristotle’s views on sensation and imagination. The Arabic version of these treatises was not a straightforward translation of Aristotle, but an adaptation that mixed translations from Aristotle with non-Aristotelian elements. Recent scholarship has begun to show that some aspects of the internal sense tradition, in particular as espoused by Averroes (Ibn Rushd, 1126–1198), have their origins in this unusual text.² In addition to these purely philosophical sources, the Greek medical tradition also played an important role. In particular, advances in the knowledge of the physiology of perception by Galen came to displace Aristotle’s tentative speculations concerning the corporeal organs of the sensory powers. Where Aristotle had opted for the heart as the likely center of perception, by Galen’s time, the brain was recognized as the seat of perception, and even the Arabic *Parva naturalia* presented the ventricles of the brain as the physical locus of the various internal senses. But it is only with the Arabic philosopher Avicenna (Ibn Sīnā, 980–1037) that a well-defined and systematic doctrine of internal senses becomes crystallized and assumes a central role in cognitive psychology. Finally, while Avicenna and Averroes were by far the most important sources for the Latin West, the views of patristic authors colored the Western interpretation of Aristotle and his Arabic followers. In particular, Western medieval accounts of the internal senses are often filtered through an Augustinian lens,

and Augustine's discussions of the powers of the sensory soul were often seen as supplementary or corrective perspectives on the internal sense traditions rooted in Arabic peripateticism.

Aristotle on the Senses and Their Objects

Many aspects of the internal sense tradition represent attempts to interpret Aristotle's theories of sense perception and imagination. Central to those theories is Aristotle's claim that in addition to the proper sensibles that are exclusive to one of the five external senses, such as color, sound, and so on, there is also a set of objects which are perceptible to two or more senses—the so-called “common sensibles” of motion, size, shape, and so on. Beyond the proper and common sensibles, both of which Aristotle considers essentially sensible in their own right, Aristotle also discusses a class of objects that on his principles is difficult to categorize as either purely sensible or purely intelligible. When a dog recognizes the soft gray shape as a cat to be chased, none of the proper or common sensibles account for its perception of “cat” or “something to chase.” Nor does the dog have the abstract concept of “cat” or “felinity” to explain this act of recognition. Aristotle refers to sensible objects of this sort as “incidental” (or “accidental”) perceptibles. His example is “seeing” the white thing as Diates's son.³ The question of how the senses can convey what seems to be non-sensory information in incidental perception is one of the main issues that the internal senses attempt to address.

The existence of the common and incidental sensibles also points to the fact that both animals and humans are able to collate information coming from the various senses into a single, unified picture of the sensory object. The basic capacity to collect the information coming from the five senses was assigned to a faculty that Aristotle and his medieval followers called the “common sense.”⁴ Augustine too used the term “inner sense” for a similar capacity. Both Aristotle and Augustine also argued that the common or inner sense is required to explain sensory apperception, our awareness that we are perceiving.⁵ But, confusing as it may be, Aristotle did not view the common sense as an additional special sense with the common sensibles as its proper object. “Common” in the two cases denotes different things: in the case of the common sensibles, it signifies an object shared by multiple senses and exclusive to none; in the case of the common sense, it implies a faculty which is common to all the senses insofar as they all convey their information to it.

Avicenna and Averroes

Avicenna is the first philosopher to develop a systematic account of the internal senses and the roles they play in human and animal cognition. Avicenna offers detailed arguments derived from a set of general principles to justify the positing of each of the internal sense faculties.⁶ Among the most important of these are that different sorts of cognitive objects require distinct faculties to perceive them, and that perception and retention pertain to different faculties. The core innovation underlying the tradition of internal senses—the positing of the so-called “estimative faculty”—derives from the first of these principles. Avicenna contends that the objects of sense perception extend beyond the external sensible form's qualities that comprise the proper and common sensibles. The senses also convey information about what Avicenna calls *ma'ānī* or “intentions,” as they are known from their medieval Latin translation.⁷ Avicenna initially explains what an intention is with an example: the sheep perceives the wolf as hostile or dangerous, even when she has never encountered a wolf before. The intention “hostility” is not a sensible quality: it is not the wolf's scent or shape, but some other non-sensible property which accompanies and is conveyed by its physical appearance. Since non-rational animals like sheep perceive these non-sensible intentions, they do not rise to the level of intelligibles. So they must be some third type of perceptual object and thus require a dedicated faculty of their own to perceive them. Avicenna calls this faculty

wahm or “estimation,” once again after its common Latin translation. Avicenna also evokes the estimative faculty’s grasp of intentions to explain the ability of animals to learn from experience as when dogs learn to fear objects not naturally harmful to them, like sticks that have been used to beat them.⁸

Once he has distinguished between forms and intentions, Avicenna then applies the remaining principles to yield a system of five internal senses, consisting of two perceptive and retentive pairs plus a combinatory faculty. The common sense is the perceiver of the proper and common sensibles, which are then stored in the imagery or “formative” faculty, the most basic type of sense memory. The estimative faculty, in turn, perceives non-sensible intentions, and the memorative or retentive power stores them. The fifth and final internal sense faculty is “imagination” (*al-mutakhayyilah*), and its role is to explain the soul’s ability to form new images, as occurs in dreaming and fictional creativity. When the intellect harnesses this faculty to aid in its operations of deliberation and inferential reasoning, the compositive imagination is called the “cogitative” or thinking faculty (*fikr*). For Avicenna, then, the cogitative faculty is not a distinct internal sense in its own right, but rather, a particular rational manifestation of imagination. Moreover, Avicenna holds that humans have estimative faculties in addition to the cogitative power, and he uses the presence of estimation alongside the intellect to explain the human propensity for making erroneous judgments even in the face of rational opposition.

While Averroes’s system of the internal senses may seem at first blush to be simply a streamlined version of Avicenna’s, his departures from his predecessor entail sharp differences in their understanding of how both animal and human perceptions work. And while a modern reader might see both Averroes and Avicenna as introducing multiple non-Aristotelian elements into their accounts, Averroes had good reason to see himself as restoring a more authentic Aristotelian psychology, since the four internal senses he retains all appear in the Arabic *Parva naturalia*, where they are localized in the brain following later medical tradition.⁹ These faculties are the common sense, which collects and collates information from the external senses; a single imaginative or formative faculty, which preserves this information; the cogitative or discriminative faculty; and the faculty of memory. Averroes rejects Avicenna’s estimative faculty as a superfluous innovation, arguing that imagination is a perceptive faculty, not merely a retentive one.¹⁰ Averroes nonetheless retains “intentions” as distinct cognitive objects from ordinary sensible forms. On his account, which reflects the use of the term in the Arabic *Parva naturalia*, to perceive an intention is to recognize the concrete individual or “core” underlying the physical qualities or “rinds” perceived by the senses.¹¹ The grasp of the intention requires a prior act of analysis on the part of the cogitative faculty to separate it from its rinds and make it available to memory. To illustrate the difference between the intention and sensible forms, Averroes identifies the forms as what a painter would depict of Zayd in a portrait of him—his size, shape, hair color, etc., whereas the intention is what we grasp in recognizing those features as belonging to the individual man, Zayd.¹² Moreover, since Averroes holds that the cogitative faculty is a distinctively human internal sense, it follows on his account that non-human animals do not have the ability to separate intentions from forms or images, and by the same token they lack a separate faculty of memory.

Augustine

Augustine discusses the soul’s sensory operations in several passages throughout his works. In an interlude woven into his proof for the existence of God in *On the Free Choice of the Will*, Augustine posits the existence of an “inner sense” in non-human animals. He argues that animal motion would be impossible if animals were aware only of their occurrent perceptions. Otherwise, animals would never pursue objects outside of their immediate perceptual range, since this depends on noticing that something they had perceived is now absent. There must, then, be an “inner

sense to which everything is conveyed” by the five senses. Since this form of awareness belongs to non-rational animals, Augustine concludes that the internal faculty in question cannot be reason, but must instead be some higher sensory power.¹³

Augustine also discusses sense perception in two later works, *On the Trinity* and the *Literal Commentary on Genesis*. In Book 11 of *On the Trinity*, Augustine seeks images of the Trinity in the cognitive capacities of the “outer human,” that is, the soul’s sensory powers, including imagination. Using vision as the paradigmatic case of sense perception, Augustine argues that images must be formed in every act of perception, although we are usually unaware of this except in deviant cases such as double vision. Once the soul actively fixes its attention on some object so as to see it, it immediately produces an image of that thing. The same account can, in turn, be invoked to explain memory, which for Augustine covers any act of retaining a likeness of an absent object. Since the production of an image is intrinsic to the act of sensation, once the sensible object is removed, its likeness remains in the percipient. It then becomes possible for the soul’s attention to be fixed on the preserved image itself as it once was on the external object, and thus to recall that object to mind. Augustine’s emphasis on the need for the percipient to fix her attention on the object shows him to be an adherent to an active theory of sensation, according to which sensation is not a matter of mere passive affection by an extramental sensible thing, but rather, it also requires the active input of the percipient in the production of the object.¹⁴ Augustine also endorses the active theory of perception in the *Literal Commentary on Genesis*, appealing to the platonic principle that lower faculties never act upon higher ones.¹⁵

The Internal Senses in the Later Middle Ages

Despite the considerable interest that the internal senses held for authors in the Latin tradition, they were seldom the focus of any dedicated discussions in their own right. Authors from the late twelfth to mid-thirteenth centuries often limited their considerations to cataloguing the different schemata of the internal senses within the psychological theories of Aristotle, the Arabic peripatetics, and patristic sources, without adjudicating among competing accounts. For later authors, the context and nature of the works in which the internal senses are discussed have a bearing on the issues that are taken up. Arts Masters teaching in the universities would sometimes introduce aspects of the internal senses into their commentaries on Aristotle’s *De Anima*, whereas theologians tended to appeal to the internal senses in a more fragmented way, the discussion being dictated by the broader theological topics under consideration.

A number of recurrent issues began to emerge as the process of assimilating the theories of the internal senses unfolded. The function of the common sense, the most basic of the internal senses, was often a focus of discussion, especially since it represented a point of contact between the Augustinian and Aristotelian traditions. As might be expected, medieval authors were especially fascinated by the Arabic accounts of intentions as a distinct category of sensory objects. Some authors embraced the concept of intentions and offered their own theories of what intentions are and how they fit into Aristotle’s classification of sensibles as proper or common, essential or incidental. Other authors dismissed the very idea that animals could perceive these allegedly “non-sensible” features of the physical world. They worried that the positing of an estimative faculty in animals seemed to blur the carefully drawn lines between sensory and intellectual cognitions, granting animals cognitive capacities beyond what was actually needed to account for their behavior. Finally, many later medieval authors came to be skeptical of the entire edifice of the internal senses. They questioned the multiplication of faculties proposed by the Arabic peripatetics, opting instead to return to the more parsimonious accounts of sense perception they found in Aristotle and Augustine.

The Common Sense and the Common Sensibles

Despite the similarities in their names, as we noted earlier, Aristotle does not link the common sensibles to the common sense in any direct way. Indeed, Aristotle spends some time arguing that there can be only five senses, and he explicitly denies that there is any sixth sense for the common sensibles. After all, the whole point about the common sensibles is that they are common to multiple senses. Aristotle also insists that the common sensibles are essentially sensible, that is, they are actually perceived by two or more of the external senses, unlike incidental sensibles. We literally see both color and shape, whereas we “see” Cleon’s son only metaphorically. Is the common sense part of the explanation of this distinction between essential and incidental sensibles?¹⁶ This was a question that many medieval authors raised in their discussions of the function of the common sense.

Aristotle’s allusions to a common sense serve to account for two phenomena: (1) the ability to discriminate between the objects of different external senses, for example, color and flavor, while nonetheless recognizing that the very same thing is both yellow and bitter; and (2) apperception or the awareness that we are sensing. Averroes, however, suggested that we could also appeal to the common sense to explain how the common sensibles are not incidental sensibles. In his *Long Commentary on De Anima*, Averroes offers two arguments for this point. The first anticipates the early modern distinction between primary and secondary qualities. Averroes asserts that the perception of the common sensibles is a necessary condition for the perception of the proper sensibles: in order to sense the proper sensibles of color and heat, for example, I must perceive them as determinate quantities of color and heat, quantity being a common sensible. By contrast, it is not necessary for me to perceive the white thing as Socrates or a snowball, or any other determinate individual. Averroes’s second argument is that the common sensibles are “proper to the common sense to the extent that they are proper to any sense.” The common sense, as the faculty to which all sensory information is channeled, has a certain proprietary claim over all the sensibles, since it is the only faculty that is affected by all of them essentially. Yet by using the term “proper” to make his point, the Commentator (as Averroes was known in the West) seems to have contradicted Aristotle’s explicit denial that the common sense has any proper objects of its own.¹⁷

These comments of Averroes became a standard point for a critical discussion among medieval authors in the thirteenth century. But before Averroes’s works became widely available, some medieval authors defended positions similar to his. John Blund (c. 1175–1248), who identifies Aristotle’s common sense with Augustine’s inner sense, goes so far as to assert that the common sensibles “are not sensed by any external sense, but rather by the inner sense which is the common sense.”¹⁸ Not only does Blund thereby make the common sensibles *proper* to the common sense, his view seems to entail that vision, touch, and so on do not themselves perceive motion and size at all, except perhaps incidentally. Blund also offers a creative blend of Augustinian and peripatetic views to construct new arguments for positing the common sense. A good example is his adaptation of the peripatetic theme that the senses themselves are unable to perceive their own activities, which Blund elaborates by drawing on the framework of Augustine’s active theory of sensation in *On the Trinity*. On this account, Blund argues, the external senses perceive only the images (*imagines*) that they construct when presented with their objects, and not the things themselves. But since vision, for example, contains no image of itself, a higher power, the common sense, must be posited to explain how we can sense that we are seeing.

Thomas Aquinas offers one of the earliest accounts of the common sense directed against the “inept” (*incompetens*) account of Averroes.¹⁹ Aquinas easily dispenses with Averroes’s claim that the common sensibles are proper to the common sense on the grounds that it flatly contradicts Aristotle’s own view. He also rejects as confused the argument that the proper sensibles depend

upon common sensibles, such as quantity. The fact that the proper sensibles can only subsist in a thing in virtue of its possession of quantity does not entail that we must *perceive* quantity in order to perceive color. If this were the case, Aquinas argues, fire, as the subject of heat, would be a common sensible perceptible by touch, whereas fire is not essentially sensible at all. It is instead an abstract, intelligible nature that is perceptible only incidentally.

After refuting Averroes, Aquinas offers an alternative account of the relation between the common sense and the common sensibles. Since the common sense is the point of convergence for all the perceptions of the external senses, its proper object is neither the common nor proper sensibles, but the modifications that these sensibles produce in the five senses. In this way, the common sense's role in sensible discrimination is reducible to its status as the locus of sensory apperception. The same mechanism also explains how the common sensibles are perceived. When sensible objects of different sizes, shapes, and locations affect the percipient's external senses, the common sense will be aware of these different sensory modifications, and thereby perceive the common sensibles. Despite his disagreement with the details of Averroes's account, for Aquinas too, the common sensibles are not directly perceived by the external senses, but rather, their perception is reducible to the common sense's higher-order awareness of the activities of the external senses.

Arguments similar to those of Aquinas appear in several anonymous *De Anima* commentaries from the Arts Faculty at the University of Paris.²⁰ While the authors of these commentaries are generally sympathetic with Averroes on his controversial views regarding the intellect, they take a surprisingly critical stance on his account of the common sense. Perhaps the most astonishing case is that of Anonymous Giele (c. 1270–1275), perhaps the most radical Latin Averroist of the thirteenth century. He rejects both of Averroes's arguments for the essential sensibility of the common sensibles on grounds similar to Aquinas. This author also accepts with Aquinas the modal interpretation of the common sensibles, according to which the common sensibles are reducible to the different ways in which the senses are impressed by their proper objects.²¹ Not all Arts Masters adopted the Thomistic modal account, however. Anonymous Bazán (c. 1272–1277) treats the common sensibles as concomitant properties that are conveyed alongside the proper sensibles: when I see a color, for example, I also sense magnitude and motion with it. This author also offers an interesting variation, evocative of the argument of John Blund, on the need to posit the common sense to account for apperception. He argues that the external senses are unable to sense their own actions because they are passive powers whose entire nature is to be “led by their external objects.”²² But since the operations of the senses are not external, but rather, internal, objects, a higher-order sense must be posited to explain apperception.

Averroes's arguments linking the common sensibles to the common sense were not universally panned by later authors. In the fourteenth century, Walter Burley (1275–1344) offered a sympathetic reading defending Averroes against his detractors.²³ Burley argues that common sensibles serve as the subject of the proper sensibles, and thus constitute their matter. But form and matter are the principles of action jointly, not in isolation. So what affects the senses essentially is not the proper sensibles alone, but the composite of the proper and common sensibles. Vision, for example, is affected not simply by color, but by a color of a specific shape and size, either moving or at rest, and so on. Burley also rejects Aquinas's charge that such an account confuses the ontological makeup of material objects with the conditions under which they are perceived, making the analogy between quantity and fire beside the point. Fire is a subject of heat insofar as this heat is something “out there” in the world, but magnitude is a subject of heat insofar as it is a sensory object that affects the organ of touch. If a proper sensible did not have magnitude, shape, and so on, it could not be sensed at all. But heat would have the same sensible effect on a percipient regardless of whether it was found in a fire or in a pot of boiling water. That is why fire is an incidental sensible, but quantity is not.

Estimation, Intentions, and Animal Minds

Most Western authors who accepted the need to posit multiple internal senses upheld a hybrid view in which elements of Avicenna's system were adopted alongside features of Averroes's account, often without explicit recognition of their incompatibility. By far, the most common departure from the original Arabic accounts of the internal senses is the restriction of estimation to non-human animals. The examples of sheep fleeing wolves and nursing their lambs seemed to capture the imagination of Western readers at the expense of the explanatory functions that estimation was meant to serve in the realm of human cognition. To make up for the missing internal sense in the human case, many Latin authors adopted Averroes's account of the cogitative faculty as a distinctively human internal sense, rather than Avicenna's view that it is simply the imagination under rational control. But since both Avicenna and Averroes accept intentions as cognitive objects in addition to the proper and common sensibles, Latin authors who construct these hybrid views also uphold the existence of intentions. Yet, these Latin authors diverge widely in their understanding of what intentions are and how they are grasped by the estimative and cogitative faculties.

John Blund views an estimative intention, such as the hostility of the wolf, as something existing in physical objects, that is, it is a real feature of the external world.²⁴ This raises a problem for Blund, however, since he assumes that every sensory object must also be a likeness (*similitudo*) of some property of the external object formed in the common sense by the proper senses. But since there is no likeness of the intention impressed on the common sense, as seems to follow from its inability to grasp the intention, from where will the estimative faculty of the sheep acquire it if not through her sensory encounter with the wolf? Blund resolves this puzzle by building perception or awareness into the very notion of a likeness. To say the intention is not present as a likeness in sensation and imagination is simply to say that they are unable to perceive the intention, because it is incompatible with their natural abilities (*non sunt nature concordantis*), that is, with the physiological makeup of their organs. This does not, however, entail that the intention appears out of nothing in the estimative faculty. The senses and the imagination are able to transmit the intention, but when it is present in them, it does not have the status of a likeness, since they cannot perceive it.

One of the most original accounts of the nature of estimative intentions is offered by Albert the Great. Albert devotes multiple chapters to the internal senses in both of his major works on philosophical psychology, the *Summa de homine* and the *Sententia de anima*. Albert's account is a notable example of the contraction of estimation to an animal power. On his view, estimation is to be understood as the analogue to the practical intellect in animals. Albert also offers a novel explanation of how intentions are perceived.²⁵ Albert holds that in abstracting the intention from the sensible form, estimation provides the animal with an awareness of the individual as such, and this, in turn, is what gives rise to the emotions of affection, fear, and so on that provoke the animal's responses. Albert remarks, "no wolf would ever have pity over its offspring unless it had knowledge both of this individual and of the fact that this individual is its offspring." But how does the intention confer this knowledge of individuals? Albert thinks that it is because the objects of estimation are "intentions" in the more general medieval sense of cognitive objects existing in the minds of their knowers. Thus, when Avicenna contrasts forms and intentions, Albert understands the form as a principle of being in the extramental thing, and the intention as the representation of that thing as a complete substance existing in the cognizer: "The intention is not a part of the thing like the form, but rather it is the representation (*species*) of the whole knowledge of the thing." Like Blund, Albert claims that the other external and internal senses are only able to perceive the aspects of the object that are compatible with their natures. But they do so in virtue of the entire perceived object affecting the percipient in some way. The unique ability of the estimative faculty, then, is to be able to recognize sensible representations as possessing intentional being in the percipient,

and this is what forms the basis of its ability to identify the object as an individual which is either beneficial or harmful to the percipient.

Albert's student Thomas Aquinas includes elements from both Avicenna and Averroes in his account of the internal senses concerned with intentions. Aquinas accepts the need to posit the estimative faculty to account for animal behavior, but unlike Avicenna, he limits estimation to non-human animals. In the *Summa Theologiae*, Aquinas argues that animals must have something like an estimative faculty in order to allow them to perceive the things necessary for their survival, citing the sheep-wolf example. Aquinas adds an interesting justification for differentiating intentions from other sensible forms. While the senses may perceive their proper objects as pleasant or painful, this is simply a reaction to the agreeableness or incompatibility of the object with the sense organ. We might think of it as an inchoate aesthetic judgment—some sounds are cacophonous, some colors are garish. By contrast, the grasp of intentions by the estimative faculty involves an awareness of their utility to the animal's overall well-being, which Aquinas attributes to a "certain natural instinct."²⁶

According to Aquinas, humans have a cogitative faculty instead of estimation, and that faculty is understood after the model of Averroes as "particular reason," that is, the ability to compare and differentiate individual as opposed to universal intentions. But exactly how are animal estimation and human cogitation analogous faculties? Aquinas elaborates on this point in the discussion of incidental sensibles in his *Commentary on De Anima*, where he considers the nature of intentions and their perception.²⁷ Aquinas argues that for any object to count as an incidental sensible, it must be cognized essentially at the time of perception by another faculty for which it is the proper object. Thus, if there are any incidental sensibles that are neither the proper sensibles of other senses (as when I "see" something sweet), nor universal intelligibles grasped by the intellect (as when I see a triangle in a proof of the Pythagorean theorem), then we will need to posit a third faculty by which these objects are essentially perceived. This is the function served by the estimative and cogitative powers. They grasp individual intentions, that is, they recognize singular things as concrete individuals. However, while both animal estimation and human cogitation perceive individual intentions, only the cogitative faculty is able to recognize the individual as "falling under some common nature," that is, as an instance of whatever sort of thing it is. Humans alone are able to perceive "this white thing" as "this human," or "this sugar cube," in virtue of the co-presence of the intellect. What does our sheep perceive when she grasps the intentions of the wolf or lamb? Taking his cue from the pragmatic nature of the standard examples, Aquinas claims that animals grasp individual intentions only to the extent that the individual in question is "the term or principle of some action or passion." A sheep knows her lamb not as "my baby," but simply as "something to be nursed," and she knows this plant not as grass, but simply as something to be eaten.²⁸ Aquinas offers a teleological justification for these limits: estimation is present in animals solely to aid in their survival. And for that there is no need to differentiate *individuals* for their own sake, but simply to recognize whether some individual thing is harmful or useful.

Despite his defense of the existence of the estimative faculty in animals, Aquinas ultimately seems to undermine the role that estimation originally played in recognizing the complexity of animal cognition. One possible factor contributing to this development may be the fusing of Averroes's and Avicenna's accounts of intentions that seems to dominate most of the accounts we have seen. Overall, Aquinas seems to agree with Averroes that the intentions grasped by the internal senses are representations of designated individuals, "thises." As such, intentions imply some sort of implicit grasp of the essences that these individuals instantiate, and that is something that Aquinas is unwilling to grant to animals even in an inchoate way.²⁹ But the explanatory power of animal estimation seems weaker on this account. To say that an animal perceives an individual as a terminus of some action or passion—as "edible" or "capable of inflicting harm"—seems to rest on at least as sophisticated an act of cognition as recognizing it as an individual of a certain kind.

It's not clear if Aquinas thinks that animals actually perceive hostility or friendliness in these cases. Moreover, it seems odd to balk at the idea that an animal could recognize an individual as *this*: experience would suggest that animals do discriminate between individuals—my cat can differentiate me both from a stranger and from a dog—but Aquinas's account seems unable to explain this insofar as it assumes that such recognition requires the grasp of a common nature that is the sole province of the intellect.

The worry that animal estimation encroaches on the intellect's territory comes to a head in a brief but well-known disagreement between two of Aquinas's successors, Henry of Ghent and John Duns Scotus. In the opening question of his *Summa of Ordinary Questions*, Henry defends the possibility of human knowers grasping the essences of created substances. One of Henry's arguments offers an analogy with the estimative faculty in animals to establish that *a fortiori* the intellect must have equivalent abilities.³⁰ Henry observes that even the senses are able to reach the non-sensible properties underlying the sensible appearances of material things, and to illustrate this he appeals to a variation on the standard Avicennian example of the sheep perceiving hostility in the wolf. Henry uses the metaphor of digging or "burrowing" (*fodiens*) to describe how the sheep perceives the wolf's hostility through its sensible appearance. Just as hostility is buried under the wolf's accidental forms of color, shape, and scent and uncovered by the digging of estimation, the wolf's substantial nature is also present under those same sensible accidents and able to be unearthed by the burrowing of the intellect. While Henry does not explicitly identify the non-sensed intentions that the sheep grasps from the wolf with its substantial form, his appeal to estimation to support the intellect's ability to grasp the substances of things suggests a strong continuity with Albert the Great's earlier attempt to explain intentions as representations of the whole perceived object, already present in the impressions on the senses but inaccessible to their limited perceptual grasp.

If the standard account of what animal estimation can do leads Henry to such a position regarding intellectual knowledge, Scotus's response is to deny that account.³¹ The embodied human intellect has no such access to substantial forms no matter how much digging it does, and animals certainly do not possess anything akin to such an ability. Scotus is openly derisive of the very idea of animal estimation, claiming that Henry is "adducing one falsehood to confirm another." Scotus then constructs an amusing thought experiment to undermine the traditional ovine examples of estimation. He asks us to imagine a sheep which is miraculously made to look like a wolf, and then consider whether the lamb would still judge the sheep to be lovable. Scotus thinks that would be absurd: a lamb will flee anything that *looks* like a wolf, whether it is harmful or not. Scotus also anticipates the obvious rejoinder to this thought experiment for those who hold the burrowing view of estimation: the intention of hostility is something distinct from the wolf's outer sensory appearance; yet, it is nonetheless always inextricably tied to *that* appearance and no other—and that is why the lamb will fear even its mother if she looks like a wolf. Scotus rejects this view since now the intention ceases to do any real explanatory work: why bother with the burrowing if one can explain animal behavior as a reaction to sizes, sounds, smells, and so on? Scotus's response to Henry implicitly seems to undermine as well accounts such as Aquinas's which differentiate between aesthetic and utilitarian perceptions of compatibility and revulsion. While the bee's attraction to the flower might involve a perception of the flower's utility for its honey-making task, on Scotus's view, one could eliminate this level of explanation simply by appealing to the bee's visual and olfactory attraction to the bright color and sweet scent of the flower.

William of Ockham expresses similar skepticism regarding the need for an estimative faculty, building on Scotus's thought experiment.³² Ockham envisages estimation as the animal version of abstractive cognition, in contrast to sensation, which provides intuitive cognition of the sensible forms of a present object. Estimation is then used as a counter-example to the claim that abstractive cognition always relies on a prior intuitive cognition of the same object. For it seems

that estimation cognizes the intention independently of any prior sensory intuition, “because the sheep knows the hostility of the wolf, not through [hostility’s] proper representation (*per speciem propriam*), but through the representation of something else (*per speciem alienam*),” that is, its external sensible appearance. Ockham rejects this view by simply eliminating intentions as distinct perceptual objects. Ockham argues that unless there is no way to explain animal behavior on the basis of reactions to the external appearances of things, positing a separate faculty with a new type of object is superfluous. If someone objects that this is not sufficient because not all animals react in the same way to the same objects (the cat fears the dog but not the mouse), Ockham responds that it is well-established that the same sensibles can cause diverse and even opposed reactions in a single subject. Ockham gives no example here, but presumably he has in mind such standard cases as the same flavor tasting bitter to a sick person and sweet to a healthy one. Ockham then repeats Scotus’s example of the sheep in wolf’s guise, agreeing with the Subtle Doctor that a lamb would flee its own mother in such a case. But then the lamb would not be fleeing because of her perception of hostility, since there is no hostility in her mother. Hence, the only cause of her flight must be the external guise her mother has been given.

Ockham provides one further counter-argument to the estimative faculty that rests on a conception of intentions different from those we have seen thus far. Where Albert, Henry, and Scotus viewed intentions as in some way bearing on the grasp of sensible objects as substances, Ockham instead observes that the standard examples of animal intentions, such as hostility and lovability, have the status of *relations*: “The hostility of the wolf does not name something absolute except the act of seeking to harm, or the power, or the nature in the power, for such an act of seeking, be it an active or a passive power.” Hostility is not some quality in the wolf like its color that is ready and waiting to affect the sheep who encounters it. And given that the capacity of the intellect to grasp relations is tenuous enough, assigning a special animal faculty to their perception is even more unwarranted: “But if hostility names a relation (*respectum*), it does not seem that a brute animal apprehends a relation, since the intellect can barely grasp one.”

If there is no such thing as animal estimation, how can we account for the obvious capacity of animals to learn from experience, without having recourse to objects like intentions? For Ockham accepts that many animals seem to have some form of practical cognition, as in dogs who appear to deliberate, and in the many cases of animals who seem to have a sense of time.³³ Ockham thinks that to account for this, all we need to posit are basic cognitive habits rooted in the animal’s ability to retain past sensibles which are no longer present to it, and consider them again at a later time. While this makes it seem as if animals have more complex cognitions, this cannot be the case, since animals lack the necessary apperceptive capacity to be aware that they have apprehended these same objects in the past.³⁴ While Ockham thus admits that animals learn from experience to the extent that they possess habitual knowledge, he says little about the mechanisms by which this comes about, and indeed he seems to suggest that even here the arguments are only persuasive (*probabiliter*). But it is hard to see how the mere retention of past perceptions could explain even the most basic forms of animal learning, unless animals had some ability to recognize the similarity between what they are now experiencing and what they have retained, or to make new connections between the information stored from a variety of different past experiences.

Many Senses or One?

The negative reactions to the estimative faculty exemplified in Scotus and Ockham represent one of the motivations that led many later medieval authors to pare down the number of internal senses. A number of different reductionist approaches can be found in diverse authors from the later thirteenth and fourteenth centuries. Perhaps the most radical and original is that of Peter John Olivi (1248–1298), a philosopher who is a maverick on many issues in both cognitive and

affective psychologies.³⁵ Olivi argues that the proliferation of senses that emerges with the advent of Arabic Aristotelianism is unnecessary: the various operations which are parceled out to distinct faculties are all the actions of a single internal sense power, which Olivi identifies with the common sense. Olivi's discussions of the internal senses are heavily inspired by Augustine, and since Augustine's inner sense corresponds most closely to the common sense of the peripatetics, it is not surprising that Olivi would opt for the common sense as the sole survivor of his reductionist project. But in addition to his appeal to Augustine's authority, Olivi offers many arguments to support the sufficiency of a single common sense, by systematically surveying each of the internal senses and explaining how they are best understood as aspects of the common sense.

Unlike critics of the estimative faculty, Olivi's views do not seem to rest on any skepticism about animal perception, or even a general concern that the activities assigned to the internal senses are not really sensory operations.³⁶ Instead, Olivi seems to reject the traditional principles of faculty differentiation and substitute new principles of his own which favor a more unitary account of sensation. For example, Olivi holds that one doesn't need distinct faculties for reception and retention; indeed, these must be the operations of one and the same faculty, since only the original perceiver is in a position to identify the retained object as the same one that it perceived in the past. Similarly, Olivi concedes that both humans and animals perceive something like intentions, and he even differentiates habitual or learned from innate or instinctual estimations.³⁷ But he argues that estimative judgments are a function of whatever perceives the sensibles themselves, since as even Avicenna conceded, hostility and other intentions always accompany images, and they require that the percipient recognizes the image as useful, harmful, and so on. But to recognize some object as manifesting some property can only be done by the faculty that perceives the object's sensory appearance—and that faculty is none other than the common sense. Olivi also anticipates Ockham's view that intentions such as the wolf's hostility have the character of relations.³⁸ For Olivi, however, this establishes that when the sheep perceives the hostility of the wolf, it must also perceive the two terms of that relation, the wolf and itself. And this again leads us back to the common sense as the percipient of both.

As to why he opts for the common sense as the sole internal sense faculty, Olivi appeals to its two Aristotelian functions of collating sensory information and apperception.³⁹ Olivi points out that all the functions assigned to other internal senses ultimately depend upon sensory information or are ways of reacting to it, whether that information is actually being perceived or has been stored from prior experience. So all that we need is a central processor which is aware of all the information that has been gathered by the senses. Since the common sense—as understood by both Augustine and the peripatetics—is the absolutely basic and necessary condition for all the subsequent operations delegated to the other internal senses, it is the most obvious candidate to survive Olivi's psychological downsizing.

A number of other authors from the later middle ages attempted their own reductionist programs. In the *De Anima* commentary of an anonymous master originally identified as John Buridan, a more modest paring down is offered as an alternative to the fourfold Averroist scheme of common sense, imagination, cogitation, and memory. Although Ps.-Buridan does not endorse either alternative himself, his proposal raises a new concern that will also be taken up by other authors. Why, the author wonders, do we need two distinct retentive powers, imagination for proper and common sensibles, and memory for intentions? Even if we grant that intentions require a separate faculty to grasp them, it does not seem that the mere preservation of intentions requires them to be kept apart from the sensory forms when they are not being considered.⁴⁰

More restricted schemes which pare the number of internal senses down to the bare minimum are evident in the authentic *De Anima* commentary of John Buridan (d. 1358/61), and in that of Nicolas Oresme (d. 1382). Buridan, like Olivi, sees no need to proliferate the internal senses beyond the common sense.⁴¹ Buridan argues that since the common sense is a superior power to the

external senses, it is able to perceive not only the sensible forms that they perceive, but also the non-sensible intentions traditionally assigned to estimation or cogitation. Buridan rejects the view shared by Aquinas and Ps.-Buridan that time is a non-sensible intention, arguing instead that it is a common sensible just like magnitude and motion, and thus within the purview of the external and common senses. So we do not need a separate faculty of memory to explain our sensory awareness of past time. Finally, Buridan manages to dispense with imagination by arguing that it is primarily a human faculty whose role is to supply images to the intellect to aid in intellectual thought.⁴² So it too can be viewed as yet another modality of the common sense, since its contents are nothing but what was once actually perceived by that power. Buridan thus concludes that “imagination,” “estimation,” and “memory” are simply different names given to the common sense when it performs these diverse operations.

Nicholas Oresme echoes a number of the themes found in his predecessors.⁴³ He argues explicitly that one needs to posit some internal sensory power beyond the external senses, offering as evidence a number of the traditional phenomena associated with various internal senses, such as the ability to make sensory judgments; the capacity to have sensory experiences, such as dreams, in the absence of actual sense perception; sensible discrimination; and apperception. Oresme then rehearses the fourfold Averroist system of internal senses, which he seems at first to endorse. While he does not use the label “intentions,” Oresme acknowledges that animals perceive non-sensible properties such as hostility and love.⁴⁴ Unlike Buridan, he preserves the distinction between two conserving powers, adding that both imagination and memory not only retain information, but also compose and divide the information they have stored. Despite this initially positive stance, at the end of his overview, Oresme judges the arguments he has rehearsed to be merely probable (*verisimilia*) inasmuch as they are primarily backed by authority. In conclusion, Oresme proposes that there might be only two internal sense powers, one cognitive or perceptive (*cognoscitiva*)—which is called by different names depending on the function it serves—and the other retentive (*reservativa*).⁴⁵ Thus, Oresme declares, “There doesn’t seem to be any need to posit more.”⁴⁶

Notes

- 1 Avicenna (1978: 97); for *phantasia*, see Aristotle, *DA* 3.3.
- 2 See Pines (1974); Daiber (1997: 36–41). Hansberger studied this text in her PhD thesis (2007) and is currently preparing an edition of the text. For accounts, see Hansberger (2008, 2010, 2018).
- 3 Aristotle *DA* 2.6.
- 4 Aristotle, *DA* 3.1; Augustine 1993, *On the Free Choice of the Will*, 2.3–5.
- 5 Aristotle, *DA* 3.2.
- 6 Avicenna (1959: 43–44, 1.5).
- 7 Much ink has been spelled over the proper translation of this term, which literally means “meaning” or “idea.” Hasse (2000: 132) suggests “connotative attribute,” and some recent scholars have adopted this suggestion, but I retain the traditional Latin calque.
- 8 Avicenna (1959: 163–164, 4.1 and 184–185, 4.3).
- 9 Hansberger (2018); see Hansberger (2019) for a fuller account of the relation between Averroes’s views and those of the Arabic *Parva naturalia*.
- 10 See Averroes (1954: 333–41), a text not available in the West until the second quarter of the fourteenth century; cf. Averroes (1974: 39).
- 11 Averroes (1974: 33, A42–43).
- 12 Averroes (1974: 41).
- 13 Augustine (1993: 34–39, 2.3s–5).
- 14 Augustine (1991: 303–318).
- 15 Augustine (1982: 200–201, 12.16, §33).
- 16 At *DA* 3.1 (425a27–28), Aristotle remarks that since we “already have a common sense” for the common sensibles, they will be proper rather than incidental sensibles.
- 17 Averroes (1953, 2.65); trans. Averroes (2009: 177–179). But compare 2.134, trans. (ibid.: 254–256), which seems more in keeping with the readings of Latin authors.

- 18 Blund (2013: 126–127).
- 19 Aquinas (1999: 205–207, 2.13).
- 20 I will refer to these commentators by the name of their modern editor.
- 21 Anonymous (1971, q. 14); trans. Pasnau (2002: 74–76); the same criticisms of Averroes are offered in (ibid.: 232–234, q. 21).
- 22 Anonymous (1971: 461–464, q. 39).
- 23 See Burley (1971, §§36–37).
- 24 Blund (2013: 136–142, c. 19, §§254–261). For an account of Blund and other early authors' views on estimation, see (Hasse 2000: 127–153).
- 25 Albertus Magnus (1968: 167–168), Bk. 3, treatise 1, c. 2.
- 26 Aquinas (2002: 73–77, 1.78.4).
- 27 Aquinas (1999: 207–209), Bk. 2, c. 13.
- 28 Aquinas's position is echoed by Anonymous (1971: 236–238, q. 23): "But the cogitative faculty in brute animals differs from that in humans, because in brutes the individual intention is only understood in relation to some task (*opus*), such that the plant is not understood by the sheep insofar as it is a plant, but insofar as it is edible."
- 29 An interesting contrast to this reluctance is found in the terminology of an earlier Arts Master (c. 1250–1260), who refers to the object of estimation as an *intelligible* form (*forma intelligibilis*). See Anonymous (2009: 156–157), Bk. 2, q. 64.
- 30 Henry of Ghent (2008: 16–17, a. 1, q. 1, ad 7m).
- 31 Scotus (2009: 29–30), *Ordinatio* Bk. 1, d. 3 p. 1 q. 1.
- 32 Ockham (1970: 405–406, 410–412), *Ordinatio* 1.3.2.
- 33 Ockham (1984: 313–316), *Reportatio*, 4.14, resp. ad 8m dubium.
- 34 Ockham, following Scotus, holds that memory has a double object, namely, the thing remembered and my past act of perceiving it. See Ockham (1984: 278–317, 4.14); for Scotus, see Wolter and Adams (1993).
- 35 Olivi (1924, qq. 52–67); see Toivanen (2007) for an overview.
- 36 For Olivi on animals, see Toivanen (2011).
- 37 Olivi (1924: 603, q. 64).
- 38 Cf. Toivanen (2011: 420–421).
- 39 Olivi (1984: 609–614, q. 66). Cf. Toivanen (2007: 452–453).
- 40 Ps.-Buridan (1991: 646–653, q. 27).
- 41 Buridan (1984: 373–389, q. 23).
- 42 This account of imagination is also shared by Ps.-Buridan (1991: 752–753).
- 43 Oresme (1995: 297–305, q. 21).
- 44 Oresme identifies these properties as objects that have no sensible species. The contrast between *intentiones* and *species* also occurs in Anonymous (1963: 248). What seems to be happening is that Avicenna's use of *form* (*ṣūrah* = *formas insensatas* in this text) is being read as equivalent to *species* in the technical sense of a representation.
- 45 On this view, "common sense," "imaginative," and "cogitative" are names for the cognitive functions, whereas "fantasy" is used for imagination as retentive.
- 46 This research was supported by the Social Sciences and Humanities Research Council.

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COGNITIVE ACTS

Giorgio Pini

Seeing a color, hearing a sound, imagining a triangle, remembering a friend, thinking about apples: these are all instances of cognitive acts. In the later Middle Ages, the notion of cognitive act was an object of sustained scrutiny. In what follows, I first present the main assumptions that thirteenth- and fourteenth-century thinkers shared on this subject. Then, I consider five controversial issues. Many more issues and different ones might have been chosen, but I hope that the few I am going to mention will give some taste of the richness of the medieval debate about this topic.

The Common Ground

It is a characteristic Aristotelian claim that things have powers: a stone has a power to fall, a plant has a power to grow, a horse has a power to run. Those powers are not necessarily exercised: a stone may be lying on my table, a plant may stop growing in winter, a horse may be resting in its stable. Accordingly, powers may be described as dispositions that a certain thing possesses even when it does not exercise them. An *act* is the exercise of one of those powers (e.g. a stone's falling, a plant's growing, a horse's running). Unlike powers, acts are occurrent and episodic events: even though horses always have an ability to run, sometimes they run and sometimes they do not. Now, a certain class of things (including non-human animals, human beings, and super-human beings such as angels, if there are any) have the power to cognize their environment (and sometimes themselves). That power is typically connected with what makes that thing alive, i.e. its soul. A cognitive act is simply the exercise of a cognitive power. As cognitive powers come in different varieties, so do the corresponding cognitive acts. So animals and human beings have the power to cognize some features of the material world such as colors, smells, etc. (the so-called "sensible qualities"). Correspondingly, they can carry out sensory acts such as seeing, smelling, etc. Some animals and all human beings also have the power to remember and to imagine (the so-called powers of the internal sense). Correspondingly, they can carry out acts of remembering and imagining. Finally, human and super-human beings have the so-called "intellectual powers," i.e. the power to think. Correspondingly, they can carry out acts of thinking. As opposed to sensory acts, acts of thinking are supposed to involve the use of no organ. In the case of human beings, acts of thinking are, in turn, divided into acts of simple apprehension (such as my understanding what an apple is), acts of composition and division (such as my forming the thought "apples are sweet"), and acts of reasoning (such as my forming the argument "what is sweet contains sugar, apples are sweet, therefore apples contain sugar"). Around the third quarter of the thirteenth century, a few Latin thinkers engaged with the view (ultimately attributed to the Arab thinker, Averroes) that

acts of thinking are primarily carried out by an intellect separated from all human individual intellects, which, in turn, think only to the extent that they are conjoined in some special way to that separated intellect (de Libera 2014). By the end of the thirteenth century, however, that view had been rejected as both philosophically unsound and incompatible with some central tenets of Christianity. Accordingly, in what follows, I will only consider the views of those Latins who hold that cognitive acts, and more specifically acts of thinking, are acts to be attributed to and only to individual human (or angelic) intellects.

Because cognitive acts are both *acts* and *cognitive*, they play two distinct roles at the same time. On the one hand, just like any other act, a cognitive act is the exercise or actualization of a power present in a subject. On the other hand, a cognitive act makes its subject cognizant of something, which is described as the “object” of that act. Let us briefly consider each of these two roles separately.

First, with regard to cognitive acts as actualizations of powers, cognitive acts are thought to belong to a special class of actualizations called “activities” (*operationes*, which translates Aristotle’s *energeiai*) to distinguish them from a different class of actualizations called “changes” (*motus*, which translates Aristotle’s *kineseis*). Medieval thinkers would typically consider the distinction between activities and changes (which Aristotle most famously drew in *Met.* 9.6, only part of which, however, was accessible to medieval authors: see Burnyeat 2008) as equivalent to the distinction between immanent and transitive actions (Aristotle, *DA* 2.5, 417a16–17). Accordingly, they would describe an activity as the exercise of a power that requires no patient on which to be exercised and does not issue in a result that is external to the agent exercising that power. By contrast, a change, in this context, would be described as the exercise of a power that requires a patient and issues in a result that is external to the agent exercising that power (e.g. Thomas Aquinas, *SGC* III.2; Henry of Ghent, *Quodl.* XI.4, f. 451rT; Duns Scotus, *Quodl.* 13, n. 27: 575; Pickavé 2015: 61–62; Pini 2015: 84–87, 99–100). For example, both seeing and building are exercises of powers. But when I build, I need some material on which to exercise my activity—bricks and mortar—and I produce something external to me (e.g. a house): building is a change. By contrast, when I see something, I need no material on which to exercise my activity: admittedly, I do need an object to see, but seeing does not involve doing anything to that object. Also, when I see, I produce nothing external to me: seeing is an activity. The same holds for all other sensory acts and for acts of thinking.

Specifically with regard to acts of thinking, it is customary to introduce a further distinction. The state of somebody who is actually thinking about something is described as a state not just of actuality, but of *second* actuality. Aristotle introduced the distinction between first and second actuality to account for the exercise of some highly sophisticated powers, such as the ability to carry out mathematical calculations (Aristotle, *DA* 2.5, 417a21–30; Burnyeat 2002). In order to be able to carry out mathematical calculations, I must first have learned some mathematics. At birth, no human being is endowed with the power to carry out mathematical calculations, but every human being of normal intellectual abilities can acquire that power by practice and learning. The relationship between first and second actuality is similar to that holding between a power and its exercise in simpler cases such as sensory acts: just as somebody maintains the ability to see when she does not exercise that ability (e.g. when she is asleep or keeps her eyes closed), so somebody maintains her mathematical abilities when she does not exercise those abilities. Now, medieval authors customarily apply the distinction between first and second actuality to any act of thinking. Specifically, human beings are considered to be in a state of second actuality when they actually think about something (say, apples), whereas they are considered to be in a state of first actuality when they know what something is but do not actually think about it. So the distinction between first and second actuality is thought to account for the commonly experienced fact that we do not always think about all the things we know.

Let us now turn to the second aspect I have mentioned earlier. By carrying out a cognitive act, a subject becomes related to a certain thing in a special way. The thing that is cognized by way of a cognitive act is variously described as its object or term—it is what a certain cognitive act is directed at, say the color red in my act of seeing red and an apple in my thinking about an apple. The link between a cognitive act and its object is usually expressed by saying that cognitive acts are *likenesses* (*similitudines*) or representations (*repraesentationes*) of what is cognized by way of them. It would be unwise to read too much in this talk about likeness and representation, as medieval authors fleshed it out in very different ways. So it seems more prudent to assume that the claim that a cognitive act is a likeness or a representation of its object only indicates that a cognitive act is that by which a certain thing becomes an object of cognition for a cognizer. Another way of making the same point is to say that a cognitive act is that by which the thing cognized becomes present *to* the cognizer or *in* the cognizer, in a special sense of “presence” that was the object of much debate (Biard 2007). The idea behind that claim is the Aristotelian view that cognition is a union between cognizer and thing cognized. Accordingly, cognition can occur only if the things cognized are united in some way to the cognizer. Being present to or in the cognizer is supposed to describe the way a thing cognized is united to the cognizer. A cognitive act is the device by which things become united to a cognizer in that way.

Disagreement

So much agreement about the general characterization of cognitive acts left considerable room to develop widely different accounts of their nature and function. Among many controversial issues, the following five may be selected as particularly significant in the light of recent scholarship.

What Is the Efficient Cause of a Cognitive Act?

Most medieval thinkers are willing to concede that God plays some causal role in the production of cognitive acts for the simple reason that God is usually supposed to play a causal role in the production of everything. But no Latin medieval thinker seems to adopt the view that God is—in ordinary circumstances—the *sole* cause of cognitive acts. Occasionalism and its application to cognition were familiar enough through Arabic sources, but none in the Latin West seems to consider them as serious options. James of Viterbo may be an exception, as he claims that God is the efficient cause of our cognitive acts. But he also adds that our intellect plays the role of formal cause, so that cognitive acts actually result from a concurrence of causes (divine and human) rather than exclusively from God’s action (James of Viterbo, *Quodl.* I.12: 167.365–168.370, 175.616–617; Côté 2014).

Consequently, there remain three possible candidates for the role of efficient cause of cognitive acts: (a) the object; (b) the cognizer; (c) both.

- a Some hold that the object plays the role of agent and the cognizer the role of patient in the production of a cognitive act. Accordingly, a cognitive act should be considered as an object’s action over a cognizer or, equivalently, a cognizer’s passion from an object. Strictly speaking, the cognizer does nothing; rather, it is the object that does everything (Godfrey of Fontaines, *Quodl.* VI.6: 171–172; Guy Terreni, *Quodl.* III.6: ll. 275–299; Hartman 2014: 235–244). The details might vary, but the general idea is that a cognitive act is just the reception of a quality produced by an object and impressed in a cognizer. This view is held on the strength of three main considerations. First, some cognitive acts are such that we seem to have little or no control over their occurrence. This is particularly obvious in the case of sensory acts. For example, my hearing of an ambulance siren howling in the street is an event that occurs out

of my control. It is admittedly more difficult to defend the claim that the cognizer is completely passive with regard to intellectual acts. But the idea is that, once the intellect is given some information, a certain intellectual act is automatically triggered. So even though I may be under the impression that I am active with regard to my thoughts, this is just because I am unaware of the complex mechanisms by which they are produced (e.g. an apple is presented to my senses, the senses act on my intellect, and the intellect consequently thinks about apples). Second, there seems to be no reason why the causal explanation of cognitive acts should not follow the same pattern as the explanation of other events. Now, the standard Aristotelian way to analyze causation is in terms of an agent's impression of a form in a patient, say, fire's impressing the form *heat* in a kettle. Similarly, a cognitive act (for example, my seeing the color red) might be explained as an agent's impression of a form in a patient (say, a red object's impressing the form *red* in my eye). Third, this account fits well with many of Aristotle's claims and specifically with what contemporary interpreters sometimes describe as the hylo-morphic account of cognition, according to which to cognize is for a subject to receive a form (Shields 2007: 140, 145–150).

- b Other thinkers regard the cognizer as the sole efficient cause of cognitive acts. This view is articulated in different ways (e.g. Olivi, *In Sent.* II.58, II.72; Durand of Saint-Pourçain, *QDC*: 13; see Pasnau 1997: 168; Solère 2013: 191–202; Hartman 2014). Unlike the first view, this approach successfully backs up our intuition that we carry out some activity when we are engaged in cognitive acts, whether sensory or intellectual. But this view faces an obvious difficulty. The objects of cognitive acts do seem to play some role in cognition. This is particularly evident in sensory cognitive acts: I cannot see anything I would like to see; rather, what I see and what I do not see largely depend on my environment and not merely on my cognitive abilities. Accordingly, the supporters of this view acknowledge that objects are a necessary component of cognitive acts even though they do not play a genuinely causal role, or, even if they do, their role in cognition cannot be straightforwardly identified with any of the four Aristotelian causes, and it is most emphatically not the role of an efficient cause. Rather, objects are variously regarded as pertaining to a special sort of cause, sometimes thought to be akin to final causality and called “terminative cause” (Olivi, *In Sent.* II.72: 36–37), other times described as a *sine qua non* cause of cognitive acts (Durand, *QDC*: 12; Solère 2013: 202–205; Hartman 2014: 244–254). Similarly, James of Viterbo claims that objects “excite” the cognitive powers, which, however, can move themselves once they have been excited, even though not as an efficient, but as a formal cause (James of Viterbo, *Quodl.* I.12: 167. 335–336, 171.501–174.595; Solère 2018: 178–186). Three main considerations are commonly brought in support of this view. First, it seems to be an essential aspect of cognition that it is an activity of a *living* subject, and an important element of being alive is to interact with one's environment in a way that is not completely passive. Second, medieval thinkers regard it as an obvious fact that the world is hierarchically organized as a ladder where material things are on the lower steps and immaterial/spiritual beings are on the higher steps. It is also commonly assumed that causation can be exercised only by what is higher on what is lower. Now, bodies, which are the objects of sensory acts and, as everybody agreed, at the very minimum an important part of what we can think about, are regarded as ontologically inferior to souls. So bodies cannot act on souls (this has been called “the Asymmetry Principle,” Solère 2013: 192). So cognition—at least, cognition of bodies—cannot be accounted for as an action exercised by an object on a cognizer (Olivi, *In Sent.* II.72; Durand, *QDC*: 12; Solère 2013: 192–193). Third, this view fits well with many claims made by Augustine, whose prestige in the Middle Ages (at least in theological circles) is even greater than Aristotle's.
- c Finally, some thinkers adopt a mixed solution in order to avoid the problems and keep the advantages of each of the other two positions. They hold that both the cognizer and the object

play the role of efficient causes in the production of cognitive acts. Again, this view comes in different varieties. Specifically, some hold that sensory acts are entirely caused by their objects (Thomas Aquinas, *ST* I.78.3; Giles of Rome, *QDCA* 1 and *Quodl.* III.13; Thomas Sutton, *QO* 34, ll. 721–2; see Cross 2014: 24; Pini 2016); by contrast, in the production of acts of thinking, even though the object still seems to play the main causal role, the intellect exercises a necessary function by carrying out both an act of abstraction, which makes it possible for the object to be present to the intellect, and an act of production of a concept (Thomas Aquinas, *ST* I.84.4 and I.84.6; Giles of Rome, *QDCA* 1). Other thinkers hold that both cognizer and object collaborate in bringing about both sensory and intellectual acts. More specifically, Henry of Ghent holds that both sensory acts and intellectual acts consist of two actions, one proceeding from the object and the other proceeding from the cognizer (Henry of Ghent, *Quodl.* II.6: 30–33). By contrast, Duns Scotus holds that sensory acts are caused by two causal events (one proceeding from the object, the other proceeding from the cognizer), whereas intellectual acts are produced by way of one causal event in which cognizer and object collaborate as singly necessary and jointly sufficient agents (Duns Scotus, *Ord.* I.3.3.2 and 3: 245–338; Cross 2014: 24–27, 122–137).

Are Sensory Acts Just Modifications of an Organ?

Those thinkers who hold that objects contribute in some way to the causation of sensory acts agree that a sensory act involves the reception of a quality or form in an organ. For example, when I see a color, a quality (called the “sensible species”) is present in my eye. That quality can be variously described as either sharing a form with the color I see or being linked by some relation to the color I see such that the quality can be called a “likeness” or “representation” of the color. But granted that the reception and presence of a quality in an organ is necessary for a sensory act to occur, is it also sufficient? For example, is my seeing a color nothing over and above my receiving the sensible species of that color in my eye? Or is something more required to trigger the occurrence of my act of sight? This question is linked to the previous one concerning the cause of cognitive acts. Those who think that sensory acts are caused *entirely* by their objects have no difficulty in describing those acts as just modifications of an organ. So they hold that a sensory act is just the reception of a form (e.g. Thomas Aquinas, *ST* I.78.3; Giles of Rome, *QDCA* 1; Thomas Sutton, *QO* 34: ll. 721–722). By contrast, those who grant the cognizer an active role even in sensation introduce a further act or component over and above the modification of the organ to account for the occurrence of a sensory act (e.g. Henry of Ghent, *Quodl.* II.6: 31–32; *Quodl.* XI.15: f. 451rV; see Pickavé 2015: 51–58; Duns Scotus, *Ord.* I.3.3.2, nn. 471–474 and *Ord.* II.9.1–2, n. 74; see Cross 2014: 24–27). The position of the thinkers belonging to the latter group is backed by two main considerations. First, if a sensory act is nothing over and above the modification of an organ, there is no easy way to distinguish between sensory acts, on the one hand, and, on the other hand, modifications of media such as air and water, for it is commonly admitted that such media receive some species or quality from objects (the so-called *species in medio*), which, in turn, act on organs such as eyes and ears. But then, why is it not the case that air sees when it receives a species of a color or exercises an act of smelling when an odor is diffused through it? If the reception of a species is regarded as a necessary but not a sufficient condition in order for a sensory act to occur, this problem can be answered by stressing that the reception of a sensible form, such as a color or a smell, is not sufficient for sensation to occur; a further act—which can be exercised only by a vital power—is required. The second consideration in support of the claim that a sensory act is not just the reception of a species in an organ is that there seem to be situations in which an organ is modified but no sensation occurs. The stock examples are that of a sleeping or unconscious person whose eyes still receive impressions from the environment (as is clear from the fact that when the

impression is sufficiently forceful, say a loud sound or intense light, that person is awakened) and of somebody who does not pay attention to her environment because she is engaged in another activity (e.g. somebody who does not hear a sound because she is thinking very hard about a difficult problem). In both cases, the organ is modified but no sensory act follows.

What Is the Ontological Status of Acts of Thinking?

Granted that cognitive acts are activities, what kind of things are they? Specifically, if the Aristotelian categories (or at least some of them) are taken as the standard list of the sort of things that there are, where in that list do acts of thinking belong?

In the late 1310s, Peter Auriol gave an account (and criticism) of some of the most common options (Peter Auriol, *In Sent.* I.25.1). Some hold that acts of thinking are passions, i.e. the intellect's being acted on by an object. Not surprisingly, the typical proponent of this view is Godfrey of Fontaines, who thinks that the intellect is passive and the object active in the production of cognitive acts (Godfrey of Fontaines, *Quodl.* VIII.2, X.12, and XIV.15). Others hold the view that acts of thinking are actions, i.e. something the intellect does or carries out. This group includes thinkers who hold widely different views on cognition in general, such as Thomas Aquinas (*ST* I.14.2; *SCG* I.53) and Peter John Olivi (*In Sent.* II.58). Aquinas arguably gives the most articulated presentation of the view that intellectual acts are actions. Even though Aquinas's position remains the same in this respect, he seems to have changed his mind about an important aspect. In his earlier writings, he holds that intellectual acts are a special sort of actions that do not produce anything. In his later writings, he comes to think that intellectual acts are actions that do produce something, but their product (a concept or "inner word") remains within the intellect (Pini 2015: 83–93). Still others hold that intellectual acts are relations (that position is presented and criticized by Scotus in *Quodl.* 13, n. 3–4 and *Rep.* I-A.3.6, n. 169; see Cross 2014: 111–117; Pini 2015: 97–98; Durand adopted a version of it, *QNC*: 38–39; see Solère 2013: 190; Hartman 2019). But the view that was destined to encounter more success is that intellectual acts are qualities—neither something the intellect undergoes (i.e. a passion) nor something the intellect does (i.e. an action), but something the intellect bears or by which the intellect is modified. This view clearly emerges with Scotus, who may well be the first to articulate and defend it in some detail (Scotus *Quodl.* 13, n. 25 and *Rep.* I-A.3.6, nn. 169–175; see Cross 2014: 171–121; Pini 2015: 96–100). Very soon, however, the view that acts of thinking (and cognitive acts in general) are qualities becomes dominant, to the point that it ends up being shared by thinkers who hold otherwise very different positions on cognition. It is the view Ockham adopts (*Rep.* III.12: 197–199; Panaccio 2004: 22–23). And it is symptomatic that Aquinas's late followers reformulate their master's position in order to attribute it to him (Owens 1963: 194–195, n. 5). Scotus's characteristic claim that acts of thinking are non-relative items, and more specifically qualities, is closely linked to his view that acts of thinking should be distinguished from two other kinds of cognitive events. On the one hand, an act of thinking (say, my thinking about apples) is to be distinguished from an act of abstraction, by which a quality (the so-called "intelligible species," which is ordinarily held to precede the act of thinking) is produced. On the other hand, an act of thinking is to be distinguished from the process by which that act is produced. The process by which an act is produced is a causal event, i.e. an action carried out by the intellect and the intelligible species acting together (Scotus, *Ord.* I.3.3.2, nn. 486–503: 289–298; Cross 2014: 128–134). By contrast, the act of thinking is the product of that process. Remarkably, however, even those who reject Scotus's own account of the way acts of thinking are produced (such as Ockham) come to embrace his view that acts of thinking are qualities. As will be shown later, that view makes the necessity to account for the relationship between a thought and its object particularly pressing. Since qualities are non-relative items, it is not immediately clear how they can be directed at something: unlike relations or relative items such

as passions and actions, a quality is not directed at anything. Indeed, it may well be the case that the view that intellectual acts (and cognitive acts in general) are qualities contributed to putting the issue of the relationship between thought and object at the center of philosophical attention in the later Middle Ages and beyond.

***Should the Union between Cognizer and Object Cognized
be Accounted for by a Third Item?***

Reacting in particular against the view that cognitive acts are qualities, some thinkers come to suspect that any attempt to map cognitive acts against the Aristotelian list of categories might be fundamentally misguided, for the nature of cognitive events is such that any account in terms of the traditional ingredients of ontology misses the point. Their idea is that, in order to account for the occurrence of a cognitive act, it might be necessary to posit nothing else than a cognizer and an object of cognition. A cognitive act is nothing over and above the coming together of these two elements. Any attempt to account for the occurrence of this “coming together” in terms of the traditional ingredients of ontology is doomed to fail, because the *cognitive* nature of cognitive events sets them apart from any other kind of events. A decisive role in singling out cognitive events as *sui generis* seems to have been played by Henry of Ghent. In the course of his debate with Giles of Rome, Henry makes the point that what characterizes a cognitive event as cognitive is not the presence of a real feature in a cognizer (such as an action, a passion, or a quality). Rather, cognition occurs if and only if the object is present in the cognizer in a sense of “being in” which must be distinguished from the traditional Aristotelian way an accident is present in its subject, i.e. as inhering in and modifying its subject. That special way of being in a cognizer came to be called “objective” as opposed to the way an accident is present in its subject (Henry of Ghent, *Quodl.* IV.21: 339.107–108; Pini 2004; Rombeiro 2011). Interestingly, even those who reject Henry of Ghent’s account of cognition accept his point about the special character of cognitive events and the necessity of positing a special way of being in order to explain how objects of thought are in the intellect. So, an apple is red because a quality, redness, is present in the apple as one of its real modifications or accidents. But even those who (like Giles of Rome and Duns Scotus) argue against Henry of Ghent that the occurrence of a cognitive act does require the presence of some accident in the cognizer are willing to grant that this is not all that there is to cognition. Rather, what is essential to cognition is that the object is present in the cognizer “as an object of cognition.” A quality is required in the intellect only because an object cannot be present in the intellect *by itself* and so must be there by a proxy (Giles of Rome, *Quodl.* III.14: 172; *QDCA* I, f. 78ra; Duns Scotus, *Ord.* I.3.3.2, n. 500: 296–297). This way of singling out cognitive events from among other events makes it possible to distinguish what a cognitive act is (which essentially involves the objective presence of the object in the cognizer) from the way that act is implemented (which may indeed involve the presence of real qualities in the cognizer). Furthermore, this way of approaching cognition as a unique sort of event makes it possible to defend the somewhat extreme view that no real feature is required to account for the occurrence of a cognitive act in addition to a cognizer and an object (Durand, *QNC*: 18–19; Solère 2013: 188–189; Friedman forthcoming). So in the first decades of the fourteenth century, two views about the nature of cognitive acts confront each other. On the one hand, some hold that a cognitive act is something over and above a cognizer and its object. Take, for example, an intellectual act such as my act of thinking about apples. The idea is that in order to account for the occurrence of my act of thinking about apples, i.e. the cognitive union between my intellect and apples, a real item must be present in my intellect. That item is a cognitive act, which, by the time that debate develops, is usually identified with a quality. So the occurrence of a cognitive act is taken to involve two parallel stories: a real story concerning real qualities present in the cognizer as accidents are present in a subject and an intentional story

concerning the objects made present to a cognizer in a special way, i.e. as objects of cognition (e.g. Scotus, *Ord.* I.3.3.1, n. 382: 232–233). On the other hand, others claim that a cognitive act is nothing over and above the union of a cognizer and an object. No extra feature is required to account for their cognitive union, i.e. for the occurrence of a cognitive act: all there is to cognition is a subject able to cognize and an object able to be cognized. So take my intellect, on the one hand, and apples, on the other hand: my act of thinking about apples occurs just because my intellect is an intellect, i.e. a cognitive power, and apples are able to be thought about, i.e. intelligible objects. The latter view is put forward by Durand of Saint-Pourçain (see the references mentioned earlier). His claim that cognitive acts are relations between a cognizer and an object seems to be intended to capture the point that no extra feature is required to account for the occurrence of a cognitive act in addition to a cognitive power and its object. It appears that Durand's view had a remarkable influence even on thinkers who rejected the details of his position. Peter Auriol is a case in point. Auriol thinks that Durand is wrong in thinking that the object plays no causal role in the production of a cognitive act; Durand is also wrong in holding that it is not necessary to posit any real quality in the intellect in order to account for the occurrence of an act of thinking. So, from Auriol's point of view, Durand fails to give a persuasive account of the *production* of cognitive acts, i.e. how cognitive acts are brought about (Auriol, *In Sent.* I.35.1.1 in Friedman, forthcoming). But Auriol also thinks that an account of how cognitive acts are produced or brought about (which does involve a causal role played by the object and the presence of real qualities in the cognitive power) should be neatly distinguished from an account of what a cognitive act *is*. And with regard to the latter issue, Auriol seems to think that Durand gets it substantially right: a cognitive act is nothing over and above the presence of an object to a cognizer. That presence (which Auriol describes in terms of “apparent being,” i.e. something's appearing to a cognizer; Auriol, *In Sent.* I.28.1; Friedman 2015) is something characteristic of cognitive events, which cannot be accounted for in terms of real features modifying the cognizer. Accordingly, both Durand and Auriol stress the unique character of cognitive acts when compared to other kinds of events. What makes cognitive acts exceptional is that they are “vital” acts—a point already stressed by Henry of Ghent (Henry of Ghent, *Quodl.* XI.5: f. 451rT). A certain act's being “vital” sets it apart from other natural acts (Durand, *QNC*: 9–12; see also Olivi, *In Sent.* II.58: 479; James of Viterbo, *Quodl.* I.12: 166.302–309; Solère 2013: 195). This emphasis on vital powers as the carriers of cognition seems to have enjoyed a certain success (it can be found, for example, in Peter of Ailly, *In Sent.* I.2.1). This approach to cognitive acts has the undeniable appeal of simplifying the machinery required to account for the occurrence of cognitive acts: nothing in addition to a cognitive power (suitably disposed) and its object is required to explain cognition. Most or all of the “intermediary” devices that several thinkers posit to account for the presence of the object in the intellect can be eliminated, at least in principle. But this simplification comes at a cost. Cognitive acts now assume the character of something very special, which can be described but not really explained except by appealing to their being “vital,” i.e. an activity that comes from one of the agent's intrinsic principles (James of Viterbo, *Quodl.* I.12: 165; Solère 2013: 195). Why am I able to think about apples? On this view, it is ultimately because apples are present and because I am such that I am able to think. It is not clear whether this really says anything more than that I am able to think because I am able to think.

What Links Cognitive Acts to Their Objects?

A further controversial issue concerns the relationship between cognitive acts and their objects. It may be helpful to distinguish two questions. First, what accounts for a cognitive act's making an object cognized? In other words, how can cognitive acts be *directed at* or *about* anything at all? Second, what accounts for a cognitive act's making a *specific* object cognized? In other words, how can

a cognitive act be directed at or about a certain object rather than another, say apples rather than pears? (For the distinction between those two questions, see Brower and Brower-Toland 2008: 194.)

These two questions are answered in a variety of ways. Let us first consider some of the answers to the first question. Those who hold that cognitive acts are actions or passions have no difficulty to account for their being directed at something, because it is in the nature of actions and passions to be grounded in something (a certain feature in the agent or in the patient, respectively) and directed at a term (a certain feature in the patient or in the agent, respectively). So, for example, Godfrey of Fontaines and Thomas Aquinas consider sensory acts, such as an act of seeing, as passions whose origin is in the object cognized and whose term is in the cognizer (see above, in the section “What Is the Ontological Status of Acts of Thinking?”). Godfrey of Fontaines extends this account to acts of thinking, whereas Aquinas (at least in his later writings) holds a more complex view, according to which the term of an act of thinking is a concept but the act of thinking is not about that concept (Aquinas *SCG* I.53; Pini 2015: 87–88). Similarly, Olivi considers an act of seeing as an action whose origin is in the one who sees and whose term is in the object seen (Olivi, *In Sent.* II.72: 36). By contrast, those who hold that cognitive acts are qualities must provide a special account of how cognitive acts can be directed at something, because qualities are non-relative items and so do not ordinarily have a term. Scotus resorts to positing a relational feature as necessarily accompanying cognitive acts, and in particular acts of thinking. He actually holds that there are two relations between thought and object: one, which he calls “measurability” and is common to all cognitive acts, is supposed to account for a cognitive act’s explanatory dependence on its object; the another relation, which he calls a “relation of touching,” is supposed to account for the special way the so-called intuitive acts are related to their objects (Scotus, *Quodl.* 13, nn. 11–12; Cross 2014: 151–169; Pini 2015: 101–102). Ockham, who also holds that cognitive acts are qualities, seems to think that a cognitive act’s making an object cognized is a primitive fact, which can be described in terms of that act’s being a similitude and its being able to work as a sign of an object (Panaccio 2004: 119–133). Finally, those who hold that a cognitive act is nothing over and above the appropriate coming together of a cognizer and an object think that a cognitive act is directed at an object simply because it is a cognitive event, namely a particular kind of vital activity (Durand, *QNC*: 9–12; see Solère 2013: 195). So they think that a cognitive act’s being about something requires no special explanation apart from its being the act of a subject that is capable of cognizing.

If we now turn to the second question, i.e. what links a certain cognitive act to a certain object rather than to another one, it seems that most later medieval thinkers hold that it is the causal link between an object and a certain act that explains at least in part why that act is directed specifically at that object (it has been argued that this view cannot be attributed to Thomas Aquinas: Brower and Brower-Toland 2008, but elements of the causal account of intentionality can be found in many other thinkers, including Godfrey of Fontaines, Henry of Ghent, Ockham; see Panaccio 2004: 136–137; Pini 2011). Duns Scotus explicitly rejects the view that causality plays a role in linking a cognitive act to an object. Scotus’s argument is that God could create a cognitive act in me about, say, apples, and that act would be about apples, not about God (Scotus, *Ord.* I.3.3.2, nn. 477–478; Pini 2011). So Scotus relies on the relations of measurability and touching in order to account for the link between a certain act and a certain object (as well as for accounting for intentionality in general, as I have just indicated). In this context, measurability seems to play the key role. For example, a thought about apples is about apples because it is apples rather than pears that “measure” that act, i.e. it is apples rather than pears on which that act’s explanation depends. Finally, thinkers such as Olivi, James of Viterbo, and Durand, who deny that an object plays any efficiently causal role in the production of a cognitive act, account for the link between a certain act and its object in terms of *sine qua non* or equivalent quasi-causality exercised by that object, whatever that means (Olivi, *In Sent.* II.72: 17–18; James of Viterbo, *Quodl.* I.12: 171.501–174.595; Durand, *QNC*: 21; Solère 2013: 202–205; Hartman 2014: 244–254).

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25

ABSTRACTION

Simo Knuuttila

In this chapter, I shall address the role of abstraction in the medieval theories of acquiring concepts from experience. After some introductory remarks on the medieval discussion of universals, I describe in the section “Illumination vs. Abstraction” the non-abstractive accounts of concept acquisition through divine illumination and influence from higher separate intellects. The section “Abstraction in Early Medieval Philosophy” deals with the Aristotelian ideas of abstraction as idealization and selective attention in early medieval thought, and the section “Abstraction in Thirteenth-Century Aristotelianism” with the notion of abstraction in the speculative psychology of thirteenth-century Aristotelians. Finally, a very different approach to abstraction in late medieval nominalism is discussed in the last section.

Universals

The medieval theories of universals are often mentioned in general works on the history of philosophy, usually with a reference to the distinction between universals *ante rem*, *in re*, and *post rem* (before things, in things, and after things). This late ancient classification was known in Latin philosophy since the twelfth century. The main example of universals *ante rem* was Plato’s theory of immaterial forms or ideas: things in the world are imitations of the ideal archetypes located in the higher sphere of reality outside of space and time. Referring to the realm of ideas, Plato could explain the unchanging structures of the changing world, the univocal meaning of universal terms of language, and the possibility of invariant knowledge about reality. While medieval thinkers did not accept Plato’s approach to the otherwise much discussed themes just mentioned, they endorsed the theological doctrine of ideas as divine thoughts developed by some ancient Platonists and embraced by Patristic thinkers such as Augustine. The question of universals *in re* was addressed in extensive discussions of whether the ingredients of the created world included universal entities that were simultaneously, essentially, and as a whole present in many individuals as common natures, whether ontologically distinct from the instantiating particulars with “less than numerical identity,” as in Duns Scotus, or without an ontological unity of their own outside the individuated particulars, as in Thomas Aquinas. Universals *post rem* were universal concepts of the intellect. Aquinas preferred the latter view to the theory of universals *in re*, but he held that the concepts are based on abstracted intelligible forms which are formally the same as the individuated forms in singular things. The theories of concept formation in Aquinas and other Aristotelians from the second half of the thirteenth century form the main context for medieval considerations on abstraction. William Ockham and his followers, who came to be called nominalists, thought

that there was no such metaphysical network between concepts and things in the world, the universal concepts being mental representations of sufficiently similar things first recognized by sensory powers and intuitive knowledge (see de Libera 1996; Panaccio 2012).

Illumination vs. Abstraction

The Augustinian view of divine illumination, the Arabic theories of separate intellects, and the more naturalist epistemology of the rising Aristotelianism were the parties of the thirteenth-century controversies about intellection and concept formation. Augustine associated the view of divine ideas with an illumination theory of concept formation. The continuous illumination of human intellect did not make it grasp the ideas themselves, but it helped humans to understand the essence and nature of things which they could in a preliminary way conceptualize by means of their perceptual and cognitive powers. The better understanding took place “in a sort of incorporeal light” (*De Trinitate* XII.15.24). Various versions of this view were put forward by thirteenth-century thinkers such as Bonaventure and Henry of Ghent, who tried to combine it with Aristotelian views by treating the supernatural illumination as complementing the natural function of the intellect. Even Aquinas accommodated his Aristotelian theory with the doctrine of divine illumination, at least on a terminological level, by speaking about the illumination of phantasms through the active human intellect. The Latin discussions of external illumination were also influenced by the translations of the treatises on the soul by Avicenna and Averroes. Avicenna argued that humans were able to form particular representations of things and even partial abstractive generalizations through their external and internal senses, but in order to grasp the intelligible essences of things and to form universal concepts, these particular representations had to be illuminated by the spiritual light of the agent intelligence, which was a higher intellectual sphere as well as the formative power of particular things. Acquired universal concepts were habits of conjoining with the informing agent intelligence. Averroes taught that both the agent intellect and the receptive intellect were immaterial higher substances with which the human mind conjoined in forming universal concepts. It follows that individuals did not have full intellectual faculties of their own. Some Latin authors interpreted Avicenna’s view from an Augustinian perspective. Siger of Brabant followed Averroes, but monopsychism was heavily criticized and Siger gave up his Averroistic interpretation of intellectual powers (see Black 2010; Noone 2010; Marrone 2011; Pasnau 2011).

Abstraction in Early Medieval Philosophy

Boethius, whose translations of Aristotle’s works and commentaries on them formed a great deal of the background of early medieval logic, was inclined to the *post rem* view of universals in his logical treatises, explaining that the universal aspect of particulars is their being understood in a universal way. If genera and species subsist in one way and are understood in another, one might think that universal concepts misrepresent the world. In his answer, Boethius refers to drawn geometrical figures about which the intellect can think by abstracting from their individual material features and understand the universal geometrical properties accordingly. This is related to Aristotle’s attempt to treat mathematical objects as the result of idealizing abstraction (*aphairesis*) by separating in thought what is inseparable in external things. Boethius also applied the conception of inductive abstraction in forming universal concepts by paying selective attention to what is common to different particulars and disregarding what distinguishes them. Boethius regards universal concepts formed through abstraction as intellectual constructions with a realist foundation. Understanding things by eliminating matter or attributes is to grasp their uniform aspects which, while not founded on separately existent entities in the external world, provide the correct basis

for universal concepts. Peter Abelard applied Boethian remarks on abstraction in his criticism of various realist theories of universals (genus and species) and in his philosophy of ontological particularism. In addressing the question of whether universal concepts have a foundation in external things, he argued that the individuals of the same species such as horses share the same status of being such, which is real but not a being. (See Spade 1994; Marenbon 1997, 2003; for Aristotelian abstraction in Alexander Aphrodisias to whom Boethius refers, see Helmig 2012.)

An influential abstractive conception of common nature was Avicenna's account of horseness itself: considered as separate from existence, it is neither one nor many and neither universal nor particular. In his treatise *On Being and Essence*, Aquinas explains that while this view holds of a nature or essence in its absoluteness, it exists as individuated in singulars and the minds that conceive of things in terms of this nature. Gyula Klima characterizes this as "the sameness of several, numerically distinct realizations of the same information-content," the content in itself being no entity (Klima 2013).

Abstraction in Thirteenth-Century Aristotelianism

Thirteenth-century Aristotelians believed that in Aristotle's view, the human intellect understands its extra-mental proper object from a universal point of view without a commitment to extra-mental universals. The common nature was said to fall under the notion of universality only as understood.

Siger of Brabant, Aquinas's contemporary in Paris, writes: "Human being and stone are universals only in the sense that they are understood universally and as abstracted from individual matter, not in the sense that they would have external existence. Since human being, stone and other similar things are abstractly understood only in the soul, they as universals are in the soul—their abstract intellections are not found among things . . . Universals can be understood as being universal things in two ways, either as existing universally or as understood universally. Universals are not universal things in the first sense, that is, as existing universally among things, for in this case they would not be concepts of the soul, but they are universal things in the second sense, namely insofar as the things are understood universally and abstractly" (*De aeternitate mundi* III: 122, 127). Aquinas writes similarly: "For the intellect does not apprehend this: that a common nature exists without its individuating principles. Rather, it apprehends the common nature without apprehending the individuating principles . . . The result, then, is that universals, inasmuch as they are universals, exist only in the soul. But the natures to which the notion of universality applies exists in things" (*Sentencia libri De anima* II.12: 121–147, trans. Pasnau).

The Aristotelians of that time developed an elaborated theory of concept acquisition by means of abstraction, following Aristotle in explaining perception and intellection with the help of the general theory of active and passive potencies. This theoretical framework considerably influenced the details of their psychology of the faculties. Let us begin with sight. When one sees a white object, the passive potency of sight is actualized by the whiteness, and simultaneously the visibility of whiteness, that is, its power of being seen is actualized in the potency of sight. These formulations were associated with a further assumption which proved to be somewhat cumbersome to the proponents of this approach: Aristotle argued that the passive potency was actualized by an activator which was already such as that the actualized potency was coming to be (*Met.* IX.8, 1049b17–1050a3; *On Coming-to-be and Passing-away* I.7). Aristotle applied this view to the passive powers of perception and intellection as well (*DA* II.5, 418a3–5; *ibid.*: III.4, 429a13–18).

The assimilation of the content of a power to the corresponding aspect of its external activator is described in the first known Latin commentary on Aristotle's *De anima* as follows: "That which moves something from potentiality to actuality is actually such as that which it moves to actuality when it is actualized" (Anonymous, *Lectura in librum De anima*, III.2: 467). Aquinas similarly tells

that the visible object as the active power is already such as that the passive power will be when it is actualized: “All things that are in potentiality are affected and moved by what is active and actually existent; the agent, in other words, when it actualizes the things affected, makes them like itself. So, in a way, a thing is affected somehow by something that is like and in a way by something unlike, as has been said. For at the beginning, when it is being changed and affected, it is unlike. But at the end, when it has been changed and affected, it is like. So in this way even sense, after it has been actualized by a sense object, is like that object, whereas before it is not like it” (*Sentencia libri De anima* II.10: 121–130, trans. Pasnau). In what follows, I mostly refer to Aquinas’s theory which he regarded as a contribution to Aristotelianism, the best philosophy of his time.

To begin with, one may wonder whether two things are confused here. It was assumed that the actuality of the intentional content of the sensory power is overlapping with the actualized perceptibility of the object. This likeness or in fact sameness in actualization seems to pertain to the actualities of powers after their having been changed and not to the initial activation of the sensory faculty by the external cause whose potency to be perceived is not actualized at this stage. This was not considered a problem, however, because of a further assumption in the potency model about the perceptible sensible form and the not-perceptible intelligible form of things. The likening of the faculty was understood in an Aristotelian way as a causal process which resulted in the patient faculty being made like the activating agent which was the sensible or intelligible form. The external activating agent was the object of the act which it caused in the faculty, its likening occurring in a form transferring way. (For Aristotle, see Charles 2000: 81–82.) The sameness of the form in a potentially perceived or understood object and the object-directed faculty of the soul was the basis for arguing that the activator is what the passive potency will become.

Aquinas explains the transfer of the visible form as follows. Before a color is seen, it causes a non-perceptible spiritual change in the medium by means of which the organ receives the visible form without matter (see *Summa theologiae* I.78.3; *Sentencia libri De anima* II.24: 45–59 and II.26: 111–126; Tellkamp 1999). In this way, the perceptible form is brought into activating contact with the sense-power, the immediate contact between the mover and the moved being a central principle in Aristotelian natural philosophy. The result is that “the sense is made like its object as regards form, not as regards its material disposition” (*Sentencia libri De anima* II.24: 74–75, trans. Pasnau).

There is an analogous application of the likening model to intellection in Aquinas, who compares the processes of perception and cognition as follows: “But since Aristotle did not assume that the forms of natural things subsist without matter, and since the forms which exist in matter are not actually intelligible, it followed that the natures or forms of sensible things which we understand are not actually intelligible. But a thing can be brought from potentiality to actuality only by some actual thing, as the sense becomes actual by what is actually sensible. Therefore it was necessary to posit an intellectual power which renders them actually intelligible by abstracting the species from material conditions. This is why it is necessary to posit the agent intellect” (*Summa theologiae* I.79.3; see also *Sentencia libri De anima* III.1 (7): 323–328 and III.4 (10): 59–63, 106–115).

The proper object of the intellect is the intelligible form of particular things (*Sentencia libri De anima* III.2 (8): 240–241). Just as visibility is an extra-mental property of the visible object, intelligibility is a property of the object of the intellect. The intelligibility of an object is rendered actually intelligible through the intelligible species which the agent intellect forms by shedding light on sensory phantasms and abstracting from their material and singular aspects. The passive possible intellect as the seat of intellection is then actualized by the intelligible species in the same way as the sensory power is actualized by the sensory form. (For the intelligible species, see Spruit 1994.)

Aquinas does not explain how the agent intellect illuminates the phantasms in the sensory soul. He only states that illumination makes them more suitable for the abstraction of intelligible species (*Summa theologiae* I.85.1, ad 4). Abstraction is described in terms of selective attention: “To abstract

the universal from the particular, or an intelligible species from phantasms, is to consider the nature of the species without considering the individual principles represented by the phantasms" (*Summa theologiae* I.85.1, ad 1; see also Pasnau 2007).

Sensible and intelligible forms which are present in the faculties of the soul are not the objects of their acts, but rather tools by which external things are sensed or understood. "The relation of intelligible species to the intellect is like that of sensible species to the sensory power. But a sensible species is not that which is sensed, but rather that by which the sensory power senses. Therefore, the intelligible species is not that which is actually understood, but that by which the intellect understands" (*Summa theologiae* I.85.2; see also *Sentencia libri De anima* III.2 (8): 264–274). While the abstracted form as such has no epistemic role apart from activating the possible intellect through the abstracted form, it was regarded important in arguing for a correspondence between the cognitive and sensory contents and the mind-independent objects. The Aristotelian foundation for this realism was found in the theory that the senses receive the sensory form of the object without matter (*DA* II.12, 424a17–24) and that substantial forms have two modes of existence, one as being actual in hylomorphic external things and another as being separately actual in the intellect (*DA* III.8, 431b28–30). Aquinas refers to the form in the soul as a similitude (*similitudo*) to what is understood or sensed (*Summa theologiae* I.85.2, ad 1). This similitude is explained as formal sameness. The same form which is a constituent of extra-mental things is in a different way present in the intellect: "The intelligible likeness through which a thing is understood in its substance must be of the same species or, rather, its species; as the form of the house which exists in the mind of the artisan is of the same species as the form of the house which exists in matter, or, rather, its species; for one is not going to understand what a donkey or a horse is through the species of a human" (*Summa contra gentiles*, III.49; for formal sameness, see Kretzmann 1993; Perler 2002; Klima 2004).

The cognitive and sensory powers of the potency model were taken to function in the service of the intentional attitudes of knowledge and perception, but the phenomenology of intentionality was hardly conceptualized in this context. Medieval thinkers made use of the terminology of metaphysical correspondence between objects and activating forms rather than between objects and the content of intentional attitudes (see Anonymous, *Quaestiones in libros Aristotelis De anima*, III.5: 311 and III.9: 321; Anonymous, *Quaestiones super Aristotelis librum De anima*, III.8: 481–482, 493; (Pseudo) Peter of Spain, *Expositio libri De anima*: 331–332). It was assumed that the formal sameness makes cognition metaphysically correct, bringing the world into the mind just as it formally is. How this would shed light on the intentional grasp of content was not explained, as noticed by Duns Scotus: "For the cognitive power must not only receive the species of the object, but also tend through its act toward the object. This second is more essential to the power since the first is required because of the imperfection of the power. And the object is the object because the power tends to it rather than because it impresses a species" (*Quaestiones super libros Metaphysicorum Aristotelis*, VII.14: 29).

Scotus distinguishes between the ontological theory of cognitive potencies and their actualization through abstracted species and the theory of intentionality which in his view is more relevant to understanding the role of sensory and cognitive faculties in human life. While Scotus's predecessors did not develop any significant theory of the relationship between formal sameness and intentionality, there were some psychological considerations of how the presence of the abstracted species in the intellect is related to the act of intellection.

Aquinas thinks that when the reception of the form makes the possible intellect actual, the first act of understanding is to conceive the common nature in a universal way, i.e. without attending to the individuating factors. The universality of this act is derived from the abstracted activating species. This first stage is the kernel of understanding which is then developed further by simple definitions sufficient for using universal terms, which primarily signify concepts and through

them things in the world: “For in the first place there is the passion of the possible intellect as informed by the intelligible species, and then, being informed in this way, it forms a definition, or a division, or a composition, signified by a word. Wherefore the concept (*ratio*) signified by a name is a definition and an enunciation signifies the division or composition of the intellect. Words do not therefore signify the intelligible species themselves, but that which the intellect forms for itself for the purpose of judging of external things” (Thomas Aquinas, *Summa theologiae* I.85.2, ad 3). Aquinas says elsewhere (*De potentia* 8.1) that what the universal word signifies can also be called a concept (*conceptio*) or an intellectual word. A concept is not simply an act of the possible intellect produced by an abstracted species; it is associated with a more or less definite definition. The elementary grasp of the intelligible nature is normally correct, but the possibility to improve it shows that the automatic abstraction of intelligible species provides only limited intellectual information (*Summa theologiae* I.85.6).

Medieval thinkers usually assumed that the acquisition and use of concepts was associated with concrete sensory phantasms of things, regardless of how other aspects of cognitive activity were analyzed. According to Aquinas, turning to phantasms (*conversio ad phantasmata*) was required for any later use of formerly acquired concepts as well (*Summa theologiae* I.84.7). Intellectual representations were stored as habitual concepts in the intellectual memory of the possible intellect (*Summa theologiae* I.79.6), and the agent intellect could activate a habitual concept only through a species which it abstracted from phantasms. But turning to phantasms had also the function of showing that abstract concepts were about the nature of the things with which one was acquainted through sensory experience: “When our intellect considers the nature of things in a universal way, it abstracts the intelligible species from phantasms, but it understands them in the phantasms, for it cannot understand the things of which it abstracts the species without turning to the phantasms” (*Summa theologiae* I.85.1, ad 5). Aquinas says that the phantasms are “examples in which as it were one examines that which one desires to understand.” They show which kinds of things occur under the universal concept one has in mind (*Summa theologiae* I.84.7).

Apart from the psychology of concept acquisition, Aquinas dealt with abstraction in many other contexts. One of these was his discussion of Aristotle’s indirect proofs with impossible premises. Averroes argued that when Aristotle used an accidentally impossible proposition in an argument, it was supposed to be true “in so far as it is possible, not in so far as it is impossible.” For example, the impossible premise “There is a body larger than the heavens” is possible as such, as regards a body *qua* body, but accidentally impossible in relation to the universe. Averroes and Aquinas held that a combination is accidentally impossible if incompatible elements taken as such, without their particular conditions, would not exclude each other. Aquinas calls such combinations possibilities through abstraction, explaining that the possibilities of things can be evaluated from the point of view of their genus, species, or individuated nature. “For example, in speaking of animals I can state that it is contingent that every animal is winged, but if I descend to the consideration of human beings, it would be impossible for this animal to be winged” (*In octo libros Physicorum Aristotelis expositio* VII.2, n. 896). That all humans are winged is an accidental impossibility but an abstract possibility when humans are treated as animals, abstracting from their species nature (see Knuuttila and Kukkonen 2011).

Nominalist Theories

In the ontological theory of William Ockham, there are in the world only individual beings from the categories of substance and quality. Some other features of reality may be real as well, but they are not beings. Ockham required such an additional factor in dealing with relations, for example, in answering the question of why the reference of universal mental concepts is not merely fictitious

when they are said to refer to individuals which are more similar to each other than other things. In explaining the acquisition of concepts, Ockham assumes that people are first acquainted with things through sensory acts. When an individual thing, say a human, is perceived, the attentive intellect produces an intuitive act about it. He calls this act a similitude, which seems to mean that it is specific with respect to the object. While the intuitive act includes an awareness of the existence of the object, an act of this type with abstraction from existence serves as a common concept that pertains to maximally similar things of this sort. By means of this concept, we conceive of each human indifferently. Ockham describes this process as follows: “First, a human is conceived by a particular sense, then the same human is conceived by the intellect, and due to that cognitive act a general notion common to all humans is acquired. This cognition is called a concept, intention, or passion, being the concept common to all humans. When this cognition is in the intellect, one immediately and without reasoning knows that a human is something” (*Summa logicae* III-2.29: 557). The universality of abstract concepts consists in their indifferent mode of representation in accordance with the ability of the intellect to recognize similarities. The concepts signify neither an abstracted common nature in the intellect nor any individualized or weakly existing nature in external things that the active intellect would abstract.

Ockham rejected the doctrine of intelligible species as a superfluous speculative postulation and also as a hindrance to direct realism in concept formation. The latter charge is not quite obvious, for according to Aquinas and Scotus, the species in the intellect was an activator of the power of understanding rather than its object. Ockham gave up the received model of active and passive intellect as well, regarding concepts as states in which the intellect can be. He developed a theory of mental language in which concepts as the acts of the intellect are mental signs having the basic semantic properties that words have in conventional languages. Simple mental terms signify naturally and uniformly in all minds because they result from universal causal processes; conventional universals of spoken and written language inherit their signification from mental language. Other fourteenth-century nominalists such as John Buridan did not follow Ockham’s refutation of sensory species and his suggestion that sensory objects directly activate a sense-power at a distance, but they followed Ockham’s theory of concept acquisition without abstracted species. And indeed, philosophical innovation continued beyond Ockham. For example, Buridan developed a general theory of meaning in intentional contexts, which Ockham had not done (see Panaccio 2004; Klima 2013; Schierbaum 2014).

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26

INTENTIONALITY

Gyula Klima

As Brentano famously put it, intentionality “is the mark of the mental.” However, as this chapter is going to argue, the medieval notion of intentionality that Brentano is supposed to have revived did not play the role of demarcating mental from physical phenomena. A close analysis of the relevant medieval philosophical doctrines will show why the medievals did not really have to worry about this sort of demarcation or other related, apparently intractable problems of modern philosophies of mind.

Introduction: What Is Intentionality?

Nowadays, all philosophy students are supposed to know that the notion of intentionality represents a fundamental, distinctive feature of mental, as opposed to physical phenomena, namely, their intrinsic directedness to an object. By the lights of Brentano (1838–1917), who is primarily responsible for reintroducing the notion into modern psychology and philosophy of mind, intentionality is that uniquely mental characteristic which can serve to set aside mental from physical phenomena. In an often-quoted passage, he describes it in the following way:

Every mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence of an object, and what we might call, though not wholly unambiguously, reference to a content, direction toward an object (which is not to be understood here as meaning a thing), or immanent objectivity. Every mental phenomenon includes something as object within itself.

(1995: 88)

Thus, Brentano regards intentionality as “the mark of the mental,” which “is characteristic exclusively of mental phenomena. No physical phenomenon manifests anything like it” (ibid.: 89).

It is also supposed to be common knowledge that Brentano merely revived and re-appropriated for modern philosophical use an old scholastic concept, relying on medieval philosophers’ (especially Aquinas’s and his followers’) technical use of terms like *intentionalitas*, to characterize mental phenomena, and *esse intentionale*, better known in phenomenologist circles as “intentional inexistence,” to characterize the specific mode of existence that the objects of our mental acts are supposed to have in our mind.

This chapter is going to argue, especially on the basis of the works of Aquinas and the great medieval “promoter” of his ideas, Hervaeus Natalis, O.P. (c. 1250/60–1323, who was probably

the first medieval author to use the term *intentionalitas* in a strict technical sense), that despite certain similarities to the modern notion, the medieval notion did not have the function it does in modern philosophy; in particular, it definitely did not play the role of demarcating mental from physical phenomena.

However, as the chapter will argue further, looking more closely into the role the notion *does* play in the medieval characterizations of cognitive acts and their objects, we can find intriguing conceptual tools for handling some nagging issues in contemporary philosophy of mind, such as the problem of the ontological status of intentional objects, consciousness, the individuation of mental acts, and the dilemma of materialism versus dualism. In general, the discussion of the relevant scholastic doctrines will show why within their conceptual framework the scholastics did not have to worry about problems of “the mental” versus “the physical” as it is customary in modern philosophies of mind.

As I mentioned earlier, Hervaeus Natalis, the stout defender of the doctrine of Thomas Aquinas, both in his academic capacity and in his capacity first as the Provincial Superior in France (1309) and later as the Master General (1318) of the Dominican Order, was probably the first to use the term “intentionality” (or rather its Latin original *intentionalitas*) as a term of art, in his treatise *On Second Intentions*.

In order to understand what this work is about, we first need to understand the very phrase “second intention” in its title. As it turns out, even the apparently simple task of clarifying the meaning of the phrase calls for a number of distinctions. Having clarified in general that the name “intention” indicates a sort of tendency of something toward something else, Hervaeus establishes that this sort of tendency can be found both in the intellect and in the will toward their own intended objects. Thus, first, we have to distinguish between intentions of the will and intentions of the intellect. The former is the sense in which in the English vernacular, we most commonly speak about intentions, as when someone says that she takes philosophy classes because it is her intention to graduate, or when she says that her intention is to take philosophy to expand her intellectual horizon. The first example illustrates a volitional intention of the intended end (graduation), the second a volitional intention that is the same as the act of will (wanting to take philosophy) itself. However, these are *not* the intentions that Hervaeus’s treatise is primarily about; rather, he intends (volitionally) to discuss intentions of the intellect.

But, since an intention is a tending of something (in this case, of the intellect) toward something (its object), intellectual intentions can be considered either on the side of the intellect or on the side of its object. In the first way, any intellectual representation, such as an act of understanding or the intelligible species directing the act of understanding toward something, would be intentions. But then again, these are *not* the intentions with which Hervaeus is primarily concerned. Even among these, namely, among intellectual intentions on the side of the intellect, one can nevertheless draw the distinction between first and second intentions, the first intentions being those that concern things that are not intentions, and the second intentions being those that concern first intentions *qua* intentions. In the second way, that is, on the side of an object of the intellect, an intention can be taken again in two ways: either materially, in a concrete manner, in which way it is nothing but the object understood whatever it is, or formally, and in an abstract manner, in which way it is the relation of the object understood to the act of understanding itself. But then again, depending on whether the object understood (a) is a thing that is not an intention or (b) an intention itself, the intention is a first intention or a second intention, respectively. So, finally, it is intentions in this sense that are Hervaeus’s main concern, namely, the relations of being intended by the intellect, pointing from an object that itself is an intention to the act of the intellect whereby it is understood.

But then, having clarified what intentions in the strictest sense are, whether first or second intentions, it is clear that for Hervaeus, they are named “intentions” from their relational property,

which is properly referred to by the term “intentionality.” Thus, *intentionality* in the strict sense intended by Hervaeus is nothing but the object of a cognitive act taken formally, namely, the relation of the object to the act itself, that is to say, the *object's being intended by the act*. As Hervaeus puts it with regard to an act of thought and its object:

Intentionality is neither the act of thought itself, nor its relation to the intelligible <object>. It remains, therefore, that it is the relation of the thing thought of to the act of thought, which is a mere relation of reason, which in turn is only a being of reason.¹

So, in stark contrast to Brentano's notion, Hervaeus's notion of intentionality is not a distinctive property of psychological acts, a relation pointing toward the immanent object of those acts; rather, it is the relational property of any object of any cognitive act, pointing from the object to the act itself. How come? What are these objects? How do they acquire this relational property? And what is the point of Hervaeus's insistence that this relation is a mere relation of reason, a being of reason in itself?

Cognitive Acts and Their Objects

Since intentionality pertains to the objects of cognitive acts on account of being targeted by those cognitive acts, we should start answering these questions by taking a quick look at these acts themselves. When we are talking about cognitive acts in the context of Aristotelian psychology, we mean acts of our cognitive faculties, namely, senses and intellect. The senses are not only the five external senses, distinguished as such by Aristotle, but also the inner senses: common sense, which integrates the information streaming in through the external senses into the cognition of recognizable and re-identifiable individual objects; memory, which stores the information integrated by the common sense in the form of phantasms, the singular representations of singular objects of experience; imagination, which is capable of recombining the various features of objects of the senses represented by the phantasms; and the estimative power in brute animals, instinctively evaluating the objects of the senses with regard to danger or pleasure, corresponding to the *vis cogitativa* in humans, which collates the singular representations of singulars for recognition, distinction, and identification, preparing the sensory information for further processing by the intellect. The intellect, however, takes all the sensory information amassed in sensory memory in the form of phantasms and prepares the first universal representations characteristic of the human intellect, namely, the *intelligible species*, in the process of abstraction, by retaining what is common to a large number of singulars under different accidental circumstances, and disregarding (though *without excluding*) what is peculiar to each. In this function, namely, in preparing the intelligible species, the intellect is acting as the so-called agent intellect (*nous poietikos*, *intellectus agens*). However, insofar as it becomes activated by these species and as it uses them for the further intellectual operations of concept formation, judgment formation, and reasoning, it is called the possible or potential or receptive intellect (*nous pathetikos*, *intellectus possibilis*, not to be confused with the *intellectus passibilis*, which is just the cogitative power referred to by a different name).

This brief survey of Aristotelian cognitive faculty psychology should remind us that each faculty distinguished here is just part and parcel of Aristotle's functionalist analysis of cognitive operations performed by us, humans, and in part by other animals as well. Accordingly, since the distinction of these faculties is based on their function, i.e. what kinds of specific feats they achieve in cognizing and recognizing objects of our experience and beyond, this type of analysis does not have to presuppose any sort of “heavy” ontological claims about the objects or about the ontological status or structure of the cognitive faculties themselves. All these faculties are described in terms of what they *do*, rather than in terms of what they *are*; hence, that question may remain a

matter of further discussion. These faculties may be just any sorts of information processing units, whether they are physically realized in the “hardware” of silicon chips or in the “wetware” of neural tissue, or, for that matter, in the “vaporware” of some purely spiritual, immaterial medium, whatever that may be, if anything at all.

Of course, one might think that describing the distinction of cognitive powers and operations in terms of the newly minted lingo of information processing units is just a vain attempt to make an antiquated theory look more attractive to a contemporary audience raised on this jargon. But just as it is useless to put lipstick on a pig, so it is in vain to try to “sell” Aristotle dressed up as your info-tech expert.

However, such an objection actually has its history backward. Aristotle’s entire hylomorphist system of metaphysics, physics, and psychology is arguing about the existence, essence, powers, and function of the various sorts of entities required to channel the flow of energy and information coming from the Prime Mover down to the movements of celestial bodies, which by the influx of their light churn up the elements of the sublunary world informing its matter in the various ways in which different combinations of this mixture are capable of receiving, storing, transmitting, and further processing this influx of energy, leading to the various cycles of generation and corruption of living things, part of which is some organisms’, namely, animals’ capability to receive vital sensory information about their narrower or broader environment, and process it for the sake of various forms of adaptation to that environment, and an even more specific part of which is some such animals’, namely humans’, ability to further process this information by the power of reason to garner information even about things that are beyond their sensible environment, including the existence of the Prime Mover itself and its role in sustaining the order of this sensible reality.

This one-sentence sketch of the “grand vision” of Aristotelian hylomorphism should at least provide some motivation to suspect why medieval Aristotelians, in particular Aquinas and Hervaeus, thinking in this framework, did not have to bother much about the distinction between “the mental” and “the physical,” and did not have to think of intentionality as “the mark of the mental,” opposing it to “the physical.” After all, if *both* physics and cognitive psychology are primarily about what we would call the thermodynamic principles of receiving, storing, transmitting, and further processing energy and information, then, even if psychological processes may have their specific characteristics, whatever *those* are, they should not be anything diametrically opposed to “the physical,” whatever *that* is supposed to be. This supposed opposition between and hence the need for a precise demarcation of “the mental” and “the physical” is simply the historical result of a rather restricted, mechanistic view of physics, on the one hand, and the similarly restricted, possibly solipsistic, primarily introspective, post-Cartesian view of psychology on the other.

But of course, the devil is in the details. So, let us see in some further detail how the scholastic Aristotelian notion of intentionality, as part and parcel of a hylomorphist cognitive psychology, physics, and metaphysics, can steer clear of many of the lures and snares of post-Cartesian dualistic physics and psychology that contemporary philosophy of mind and cognitive science are still challenged by.

Cognitive Acts and the Intentional Being of Their Objects

For Aristotelians, cognition starts with sensation. The Aristotelian hylomorphist idea of what sensation consists in is encapsulated in Aristotle’s paradigmatic example of the signet ring and its impression in a piece of wax. Just as the shape of the ring impressed upon the wax informs the wax, which receives and preserves this information without becoming another ring having the same shape itself, so do the sensible qualities of sensible objects inform the senses that receive, and in more advanced animals store this information for further processing, without becoming

qualified by those qualities themselves. There are a number of important points to note in this paradigmatic example.

- 1 The impression in the wax is *both* the *physical* shape of the wax and the *intentional* shape of the ring. It is definitely not the physical shape of the ring, which, of course, stayed in the ring informing in physical being its gold after making the impression just as it did before. However, the impression of the ring in the wax is still the same shape in the sense that it is an exact copy of the shape of the ring, modeled after it, encoding by its depressions and elevations the (negative of) the depressions and elevations of the shape of the ring in a reproducible form. This is what the scholastics referred to as the wax now having the shape of the ring in *esse intentionale* or even in *esse spirituale*, as contrasted with the same form's *esse reale* in the ring. Note that accordingly, there is nothing "spooky" about *esse spirituale* in this sense: indeed, it does not have to be even immaterial; the *esse spirituale* of a form in a subject is merely contrasted with its *esse reale* in the object on account of the real form informing the object in real being, whereas the intention merely informing the subject *about* the object, without informing the subject in real being.²
- 2 Accordingly, a form's inexistence in a subject in *esse intentionale* is nothing but an object's form in *esse reale* being encoded by the subject's form informing the subject in *esse reale*. So, the real form of the subject, as long as it encodes the real form of an object, is an intentional form of the object in the subject. It is on account of this intentional form or simply intention of the subject that the object becomes characterized by intentionality, thereby becoming itself the intended object of this intention in the subject.
- 3 The real form of the subject which is the intention of an object is an intention merely on account of encoding information about the form of its object. Therefore, just any information-carrying form is an intention in any subject, whether it is alive or not and whether it is conscious of this information or not, which is why Aquinas regularly talks about the intentions of colors being in the air in *esse intentionale*. Accordingly, consciousness or even being alive is not required for an intentional state. Intentions are merely information states, some of which are had by living organisms, some of which are processed by their vital mechanisms in adapting to their environment, and some of which, in turn, are actually processed with high priority, that is to say, with the degree of attention required for consciousness.
- 4 Finally, it is clear that intentions on the part of our cognitive faculties can survive or even precede their objects (as does the impression of the old ring, and the mold for a new one); so, the existence of the object is generally not required for (indeed, sometimes it is even excluded by) the existence of its intention; thus, intentions can naturally concern non-existent objects. The objects of our intentions are just whatever these intentions encode information about, but depending on the kind of cognitive act that forms the intention, the object may be required to be present (as in the case of sensation), past (as in the case of remembering), future (as in the case of anticipation or expectation), merely possible (as in the case of imagination), or even represented without any difference of time and space (as in the case of understanding). But just because something is understood without any difference of space and time, it does not mean that it *is* without any such difference, indeed, not any more than remembering something that existed in the past would mean that somehow it retains some weird mode of being in the past, so that it is somehow still there for us to return to and interact with. This is precisely the point of Hervaeus's insistence that intentionality is a mere relation of reason, which means that what such a relation relates to a cognitive act may be ontologically absolutely nothing, although there is something very real in our mind that it is related to. Accordingly, it should be clear that the intended objects of the intentions on the part of our cognitive faculties do not have to form a separate ontological realm of "weird entities" that may have

mere being or subsistence, but no existence, *à la* Meinong. Our cognitive intentions in our cognitive faculties may concern objects that on account of being intended have intentionality, but for an intended object to have intentionality is not like for it to have a color or a shape; it is rather for it to be represented by an intention carrying information about it, which may carry the information that it has, had, will have, or could have a color or a shape, or for that matter the information that it has none of these, or some other information without any of these.

Intentionality and the Individuation of Cognitive Acts and Objects

Intentionality, therefore, the relation of being intended by a cognitive act on the part of the object, establishes a logically necessary connection between a cognitive act and its object; it is the *logical glue* that ties them together, so much so that the individuation of the one is logically tied to the individuation of the other. What this means is that, say, act a_1 , insofar as it is the intention on the part of the subject, can only have object o_1 as its intended object, in such a way that one cannot swap out o_1 for o_2 , without thereby swapping out a_1 for a_2 . Since a_1 *qua* the intention of o_1 is nothing but o_1 in *esse intentionale* in the subject, swapping out o_1 for o_2 is *eo ipso* swapping out a_1 for a_2 , despite the fact that ontologically o_1 and a_1 are distinct items.

However, that ontological distinctness simply means that the *ontological carrier* or *realizer* of a_1 , whether it is “hardware,” “wetware,” or “vaporware,” is merely contingently identical with a_1 . That is to say, a_1 , *qua* intention, has conditions of identity, tied to the identity of its object, other than the carrier realizing it.

This is why, to use Hilary Putnam’s example (1981), the portrait of Churchill modeled by an artist after Churchill’s face is Churchill’s portrait, actually carrying information about Churchill’s features, whereas the exact same shape resulting from the random crawling of an ant in the sand is not. For the ant’s crawling is not part of a system of encoding transferring information from Churchill’s features into the sand, whereas the artist’s drawing is.

Were the ant’s crawling driven by a bionic tracing mechanism, say, some face scanner sending information to a computer that would, in turn, send signals to a processor driving the ant’s muscle contractions to move the ant along a trajectory that traces the features of Churchill’s face, it *would* encode information about Churchill’s face; so it *would* then be Churchill’s face in *esse intentionale* in the sand.

Note that it is the *same shape* that in the former scenario *merely looks like* Churchill’s face in *esse intentionale*, while it *isn’t*, whereas in the latter scenario *it is*, depending on its relation to its object, Churchill’s face in *esse reale*. This is what it means to say that the conditions of identity of intentions are not the same as the conditions of identity of their carriers. The conditions of identity of intentions are determined extrinsically, whereas those of their carriers are determined intrinsically.

In fact, this is the whole point of Hervaeus’s notion of intentionality being primarily a relation pointing *backward*, as it were, *from the object toward the subject*: the individuation of the act of the subject is tied to the individuation of the object, and *not* the other way around as in modern philosophy. This simple observation has an array of far-reaching consequences, both historically and theoretically, which I will for now simply lay out for your further consideration.

Given the “hyper-externalist” conception of intentionality outlined here,³ tying by logical necessity the individuation of cognitive acts to the individuation of their objects, there is no logical possibility for a cognitive subject to have the same cognitive acts with the variation of the identity of their objects. But this is in stark contrast to all post-Cartesian, indeed, some late medieval nominalist conceptions of the identity conditions of mental acts, which would hold the direct opposite, namely, that the identity of their objects is determined by the identity conditions of the mental

acts themselves, whose identity is determined by what sorts of entities they are. Accordingly, on this “modern” conception, it is perfectly possible for a cognitive subject to have exactly the same mental acts regardless of what happens to their external objects, whether due to the manipulations of God, an omnipotent deceiver, a mad scientist, or just the rebellious robots of the Matrix.

To be sure, the mental acts of these subjects, being what they are, would still exhibit intentionality, and point toward some *immanent, phenomenal* objects. But since the identity of these phenomenal objects is determined *immanently* by the intrinsic properties of the cognitive act, they are at most *logically contingently* identical to any external objects, or possibly to none at all. Accordingly, the in-principle undetectable deception of the Cartesian Demon-scenario becomes a logical possibility, dictating the retreat to the only remaining certainty, namely, the solipsistic certainty of the Cartesian *ego*. But this is precisely how the anemic Cartesian *ego* or Lockean *self* as the seat of consciousness of a possibly merely phenomenal reality is carved out from the flesh-and-blood Scholastic-Aristotelian human person, having both feet planted firmly in physical reality, yet by means of reason reaching up beyond this material reality into the immaterial—yet just as real—realm of purely spiritual reality.

Notes

- 1 Hervaeus (2008): “intentionalitas non est ipse actus intelligendi nec eius habitudo ad intelligibile. Relinquitur ergo quod sit habitudo ipsius rei intellectae ad actum intelligendi, quae est relatio secundum rationem tantum et dicit tantum ens secundum rationem.”
- 2 Aquinas, *Summa Theologiae*, Ia, q. 56, a. 2, ad 3 (1963):

Ad tertium dicendum quod unus Angelus cognoscit alium per speciem eius in intellectu suo existentem, quae differt ab Angelo cuius similitudo est, non secundum esse materiale et immateriale, sed secundum esse naturale et intentionale. Nam ipse Angelus est forma subsistens in esse naturali, non autem species eius quae est in intellectu alterius Angeli, sed habet ibi esse intelligibile tantum. Sicut etiam et forma coloris in pariete habet esse naturale, in medio autem deferente habet esse intentionale tantum.
- 3 For more on this idea of “hyper-externalism,” see Klima (2015).

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MENTAL LANGUAGE

Joël Biard

The idea that thought is like a dialogue of the soul with itself dates back to Plato.¹ But talking about mental language in the strict sense implies the fact that the field of intellections or concepts is made of meaningful units carrying semantic properties and being articulated in a certain syntactical structure. Such an approach goes beyond the idea of talking with oneself; it is neither, strictly speaking, that of Aristotle, in his fundamental works on which medieval logic and semantics were built, even more so in his psychology. At the beginning of the treatise *Peri Hermeneias*, Aristotle presents oral expressions as the symbols or signs of the affections of the soul, which are images of things. Aristotle studies the relationship between these affections and these things in the *De Anima*. In this treatise, Book III offers a theory on the intellect and its acts, on the intelligible and its relation to the sensible without any mention of language. However, from Boethius, the beginning of *Peri Hermeneias* becomes the subject of various interpretations that tend to give psychological affections (*passiones animae*) the status of a sign. This opens the door to the idea that one could perhaps deal with the mental field as a language, but in itself it is not sufficient.

This approach is neither that of Augustine, though he is a constantly cited authority. Augustine develops a whole theory of the “interior word” or “word of the heart” (*verbum mentis*), in connection with his investigation on the Trinity in which the second person is named the Word. But Augustine’s interior word is not strictly speaking a language: it is to a greater extent what makes the language meaningful, but it is not really structured as a linguistic composition.

The full notion of mental language was developed at the end of a long genealogy which re-worked all these elements. In antiquity, there was much interest in the composition of mental acts. The Middle Ages witnessed many debates about concepts and their status as sign or signified. In the thirteenth century, the notion of a mental word was strongly embedded in reflections on language and knowledge. However, the theory of mental language in the strict sense is fully developed only in the fourteenth century, especially with William of Ockham. Mental language then comes to the forefront of logic, as it becomes the language *par excellence*, the one that is used to assess the meaning and truth value of spoken expressions. The theory of mental language then left a deep mark on late medieval semantics, even though, from its very beginnings, it provoked questions and discussion.

The history of mental language has been studied in detail by Claude Panaccio in various articles, and especially in his book *Le Discours intérieur*.² In 2005, a symposium on the history of this theory and its various components was organized by the European Science Foundation,³ in Tours, France. Many articles and an in-depth study by Martin Lenz⁴ have been written on Ockham’s theory. The process that leads to the theory of mental language is fairly well studied, as are a certain

number of theoretical issues linked to it: the structure of the language, the respective status of mental and spoken language, universality, and so on. Its developments throughout the fifteenth and sixteenth centuries are less well known, despite E. J. Ashworth's pioneering studies.⁵

From the Word to the Language

When William of Ockham evokes mental language at the beginning of his *Summa logicae*, he associates the “conceived terms”—mental elements of a mental proposition—with the mental words mentioned by Augustine in Books 9 and 15 of *On the Trinity*.⁶ However, there are significant differences between the Augustinian doctrine of the word and Ockham's theory of mental terms. Augustine in the fifth century re-uses the common distinction shared by all Greek schools of philosophy⁷ between uttered speech (*logos prophorikos*) and internal speech (*logos endiathetos*). He embraces this distinction by giving it both a theological foundation and a key role in his theory of language.

Augustine develops the theory of the interior word or word of the heart through an analysis of the human mind as the image and likeness of God. The study of the interior word shows us, “as in an enigma,” the Word of God. The main point of this doctrine is that the word remains immanent, just as the divine Word (with which God creates) does not depart from God.⁸ The inner word is prior to any exterior, uttered word; and it does not belong to any language (*nullius linguae*): it is unique for all men, universal, and not subjected to linguistic variation.

This word can even exist without being externalized.⁹ It is thus equated with thought (*cogitatio*), but thought is understood by Augustine through a dual model: on the one hand, the words, and on the other, the vision.¹⁰ When they are external to the mind, speech and vision are different, but in the mind, they tend to merge. Thus, the word of the heart is different from our uttered language, not only because it is internal, but also because the convergence between voice and vision suggests first an immediate connection and second, an act that cannot be analyzed into elements or sequences spread out over time.

The inner word must nonetheless use some “signs” to express itself. Thus, we finally find the communicative function of language, through an instrumental relationship between the interior word and of a particular exterior language. This relation applies not only to the words, but to all kinds of signs (gestures, for example). Uttered language consequently becomes a sign of the inner word, which is called a “word” first. The connection between the mental and exterior words is a relationship based on expression. And to clarify this relationship, Augustine even compares it with the incarnation by which the Word of God becomes flesh.¹¹ We have here a strong opposition between the field of exteriority—which is that of the materialization, of the extension—and the spiritual field which rather is a simple act. From this point of view, the Augustinian doctrine departs from the *logos endiathetos*, to which the ancient authors attributed some rudimentary discursive forms. This is why a debate over the possibility of decomposing a mental proposition into several elements exterior to each other, unfolding in a linear progression, will resurface in the fourteenth century. Gregory of Rimini, in the middle of that century, holds that the mental proposition itself (not the simple image of spoken language, but rather the mental utterance that is of no language) is just a simple act: it is called a proposition by an “extrinsic denomination” alone because such an utterance, caused by a simple intuitive knowledge of things, can only be expressed with the subordination of a spoken proposition.¹² This thesis generated much discussion.

Thus, even if Augustine is constantly quoted, his theory of the mental word is very different from that of William of Ockham, especially as Ockham presents it in his *Summa logicae* (1323). The fact that we can here speak of real mental language does not only come from a vague reference to the three types of propositions (written, spoken, and mental) already mentioned by Boethius, but also because of the elements of the mental proposition: they really have the status of signs, contrary

to the Augustinian word which had to “assume” a sign to express itself. Indeed, according to William of Ockham, there are three kinds of signs.¹³ The concept is not only or primarily what is meant by the spoken term; it is itself a sign. Controversy had arisen about how best to interpret the beginning of Aristotle’s *Peri hermeneias*, and William of Ockham’s reading—already proposed by Roger Bacon during the second half of the thirteenth century—adapts Aristotle’s text to this new theory of signs. According to this reading, all signs, whether written, spoken, or mental, take the singular things of the world as signifieds, while the spoken signs are “subordinated” to a conceptual sign. However, the concepts are not signs of the same nature as that of the words: these are natural signs and not conventional signs. This is why they are common to all humans.

Can we determine more precisely this natural signification found in Bacon, Ockham, or some of their successors? Two models here are competing or complementary: that of similarity and that of causality. The similarity model compares these natural signs to an image, even if it is sometimes possible to get a more elaborate conception of structural similarity. But William of Ockham puts more emphasis on the model of causality in his *Summa logicae*. In a naturalistic approach (where something must be present to generate a first psychic impression), the concept is an act of the intellect, which, as an effect, is a sign of its cause. Of course, this pattern quickly becomes more and more complex as we start to consider knowledge that cannot be reduced to the immediate apprehension of a singular thing, but it is still the basis of the whole process.

However, taking elements as signs is not enough to talk about language: they must also be linguistically organized. In their descriptions of interior language, several ancient authors had already emphasized some form of discursive thinking, but it was not language in the strict sense of the term. On the contrary, in Ockham’s theory,¹⁴ mental terms are classified according to the different “parts of speech” that Priscian had distinguished in his *Grammatical Institutions*. Not all components of discourse can be found in mental language, but the latter nonetheless includes nouns (including here both adjectives and substantives), verbs, and also pronouns, adverbs, conjunctions, and prepositions. In the same way, some “accidents” of these parts of speech are as suitable for mental language as they are for spoken language. For example, this is why nouns have in both mental and spoken languages cases, number (singular or plural), and comparison (comparative and superlative for adjectival nouns); likewise, the verb has mood, gender (that is active or passive voice), number, tense, and person. There is no strict parallelism since some of the spoken language accidents are not relevant to mental language (e.g. gender for the noun, or conjugation for the verb), but we take into account all those which contribute to determining what the terms refer to and the truth value of propositions. This is sufficient enough to organize a logical syntax, a grammatical organization of the conceptual field.

Thus organized, elements then carry semantic properties: relations of meaning, connotation, and supposition are assigned to concepts. It must be remembered that supposition is the property by which a term, in a propositional context, refers to one or more real things, according to certain modalities. Since the twelfth century, it was the main tool of semantic analysis, and many other properties were subordinated to it. Once the concepts—naturally signifying the thing (in the case of a singular concept) or similar things (in the case of a common concept) that brought them about in the mind—are articulated in sequences in accordance with the logical grammar we just mentioned, they refer to their signifieds in such and such a manner and thus create real propositions the truth of which is susceptible to evaluation. In the *Summa logicae*, it even appears that mental language is the first vehicle of meaning and truth. Since spoken signs are subordinated to mental signs, it is first the signification of the latter that must be analyzed; it is the mental structure of the statement that must be specified in order to remove any ambiguity and judge whether it is true. William of Ockham moves the whole logical conceptuality to the level of thought, whereas it had hitherto been mainly applied to spoken language.

This primacy of mental language makes it the language *par excellence*, the first language out of which we must judge all others. It finds a radical extension in some texts by Peter of Ailly. In his *Conceptus* (written in the 1370s), there is an introductory presentation of statements and signs which is close to that of William Ockham. Referring to the discussions that had appeared on the simplicity or complexity of a mental act, Peter of Ailly argues that a mental proposition can be decomposed into meaningful complex units, and that some of them truly signify some things—they are called “categorematic terms”—while others serve a dual purpose: first, they organize or structure these signifying units, and second they modify the referential capacity of the terms belonging to the first kind—they are called “syncategorematic terms.” When in the *Conceptus* Peter of Ailly classifies these elements according to the usual grammatical categories, this makes it look as if mental language is meant to have absolute primacy over spoken language. For grammatical categories do not apply to these elements in a secondary and derived way, but rather in a proper and primary way. Elements of mental language are organized according to the syntactic properties they naturally possess.¹⁵ As for the grammatical organization of spoken language, it is explicitly dependent on the organization of mental language.¹⁶

During the same period, some other treatises were written on concepts and they testify to a similar pattern: the scheme of the interior word is abandoned in favor of a description of the mental field through mainly linguistic categories.¹⁷ Indeed, the *Treatise on Concepts* by Paul of Gelria (1380s) begins with a chapter on the different cognitive powers, followed by a chapter on signs. In this context, the sign, properly natural such that it signifies by itself and not through the use of an instrument, is identified with the concept or cognition¹⁸ (*cognitio vel conceptus*). Then, there is an analysis of elementary natural signs according to the types of their terms and their ways of signifying.

From Intellection to Concept, or the Semantic Redefining of Intentionality

The third part of Aristotle’s treatise *De Anima* studies the intellect extensively. It raises the question whether the intellect is separated from the body, and it fleetingly introduces the difference between the agent intellect and the patient or possible intellect. But there is nothing which looks like some kind of “language of thought.” Psychology and noetics, which are developed in the Middle Ages on the basis of the *De Anima* and its ancient and Arabic commentaries, evolve independently from and beside the study of linguistic expressions.

From Boethius to Abelard, the elements that compose thought are designated under the term of intellection, *intellectus*. Peter Abelard begins his *On intellectibus* by distinguishing and articulating the different types of intellection in accordance with the different powers of the soul (sensation, imagination, estimation, science, and reason). He bases his work on that of Augustine and Boethius.¹⁹ Abelard does not neglect the composition of intellectual acts and seeks to determine what effect they have on the meaning of linguistic utterances, but for him it is mostly a question of logical operations such as conjunction or word division, or more complex operations such as inferences or embeddings of propositions. When it comes to the semantic status of intellections, Abelard follows Aristotle’s semiotic triangle and, whatever precisions or variations he gives in one work or another, the crucial question remains: how words refer to things (*nominatio*) while giving birth to intellections about them (*significatio*).

The dissociation of the language plan from the psychological plan was maintained under various forms. However, Thomas Aquinas made an attempt to synthesize the Aristotelian noetic and the Augustinian theory of the mental word.²⁰ Thomas develops a theory of abstraction, starting with the thing as it is given to us by the senses. This gnoseological process leads to the production of a *species intelligibilis* that informs the possible intellect. It is the result of a transfer of information

from the sensible through the external sense, common sense, and imagination; this transfer involves sensible species and phantasms. This intelligible species is not the object of knowledge, but that by which intellect knows the thing. Still, even though it results from the process of abstraction and the conversion of the intellect to phantasms, it is only the starting point of the act of intellection. The latter then involves several elements: the understood thing (the *res* or its quiddity), the intelligible species, the act of intellection itself, and the mental word.²¹ This is how Thomas Aquinas gives the *verbum mentis*, the word of the mind, a central position in several of his works. The mental word is produced (as engendered) by the act of intellection: it has intelligible being and it survives as long as the act occurs. It is that in which the thing or its quiddity is known.²² If Augustine believed that a word had to be embodied in a language, the problem here really is first gnoseological. Thomas links this word to Aristotle and Boethius's *passiones animae*, and from a semiotic point of view, he makes the word—which can be given the synonyms of *conceptus*, *conceptio*, *ratio*, *intellectio*—the first signification of the spoken term. In this respect, it is more an object of signification than a signifying element.²³

To what extent can we consider it to be a mental language? In a broad sense, Aquinas believes that there is indeed such a thing as a mental *word* which is essential to cognitive operations, and to which is assigned a certain position in the whole semiological system. But Thomas does not really talk about a possible comparison, and even less about an assimilation, with a *language*. The only aspect that should be emphasized and which will play a role in the theory of mental language is that the mental field, considered as the first object of logic, may be subject to some operations of composition. There are simple concepts in which one captures the quiddity of things that are signified by nouns, and there are compositions and divisions signified by enunciations.²⁴ But nouns and enunciations are reserved for spoken language. For Aquinas, the composition in thought is not that of really signifying elements.

We can say that Thomas Aquinas is the one that goes the furthest in the synthesis between the word of the mind and the Aristotelian theory of the intellect. However, not only did this synthesis raise questions about his interpretation among his readers (realism or representationalism?), it was also called into question by those who believe that all that comes along with a concept, in addition to the act and its object, to be superfluous (Peter John Olivi and then William of Ockham). Regarding our topic, Aquinas's synthesis does not lead to a real theory of mental language, so that a theory of knowledge and theory of language can be kept separate.

Could there have been a theory of mental language broad enough to include gnoseology in the Middle Ages? This trend existed. From a certain point of view, Peter of Ailly goes in this direction: he tends to assimilate representation and signification so that the mental sign becomes the model of any signification, even if he maintains a distinction between various types of signs, including the distinction between the formal signification of the concept—associated with the act of conception—and the objective or instrumental signification of conventional signs which involves the position of a representative intermediary. At the same time, the notion of an interior word seems to fade. The term disappears in the logical works of John Buridan, and, more surprisingly, it is virtually absent from the *Commentary on the Sentences* by Peter of Ailly. The chapter dealing with the Word simply discusses the union between the two natures in Jesus Christ. In his *Questions on the Treatise of the Soul*, Peter of Ailly nonetheless adheres to a psychology that is completely independent of his theory of language, and he defends the existence of species, both sensible and intelligible. Thus, even in this context, the study of the soul was not reduced to the theory of mental language. Nevertheless, the analysis of representation tends to develop as a semantics of the mind. The deletion of the mental word is not a coincidence. The Word, originally linked to the metaphor of engendering, favors being described as a kind of expression, and not some kind of reference or direct designation. If these several functions can coexist, the question of what dominates and organizes the act of language persists. According to the theorist of mental language, one does not have to exteriorize what he or she carries within herself. Rather, she only

needs to provide a signifying sequence, an organized plan whose elements are subject to rules of composition and interpretation. Intentionality is then governed by semanticity.

Scope, Discussions, and Questions

The theory of mental language, as formulated in the fourteenth century, deeply influenced subsequent discussions. It extended to authors such as Albert of Saxony agreeing with William of Ockham on these issues, and Peter of Ailly who pushed to its extreme the extenuation of the spoken language to the benefit of mental language. The theory of mental language was used, despite some controversy over its internal structure, until the sixteenth century, as the studies by Jennifer Ashworth show: they discuss especially the possibility of distinguishing parts, of their mutual externality and their order; they discuss its status through the issue of the adequate significate of the proposition; etc.

It is worth noting that the theory is developed in the context of a change in the status of the object of logic. In the twelfth century, logic still has language as its object, and language is considered in terms of its truth or falsity. But generally in the fourteenth century, under the influence of Arabic treatises and at the end of a long process in which Albert the Great and Robert Kilwardby played an important role, logic takes the forms of thought as its object. Thus oriented, logical analysis implies a certain structuring of the field of thought into concepts, propositions, and arguments. This is what explains the omnipresence of the idea of “mental proposition,” even when the elements of the conceptual field are not explicitly apprehended through semiological categories, as is the case with John Buridan.

Mental language also contributes to a certain number of logical instruments or modes of analysis that had been in use since the twelfth century. An essential aspect of medieval logical analysis is the analysis of the semantic ambiguities arising from such and such use or from some particular syntactic organization. Most of the chapters of logic—obviously without being reduced to this one function—are correlated with these disambiguation procedures: theory of modes of supposition, syncategoremes, fallacies, etc. Such procedures do not necessarily imply a strong theory of mental language, but mental language can nevertheless solve verbal difficulties by only retaining phenomena considered irreducible and relevant in terms of meaning and truth. Mental language’s means of expressions are consistent with its purpose: to form propositions that can be true or false. The theory of the semantic properties of words, the distinctions such as that of the categorematic terms and syncategorematic terms, the theory of absolute terms and connotative terms—all these theories end up being first and foremost applied to mental language.

On these new bases, the theory of mental language also raises questions about the universality of logic structures, and even of certain mental contents. In antiquity, the disciples of the *logos endiathetos* had believed it to be independent from particular languages; similarly, Augustine’s mental word is derived from no language. With a real mental language however, the question is raised differently, and the thesis is much stronger. Not only is this language universal, primary, and it subordinates particular languages, but also the primacy of the conceptual sign leads to the fact that several languages’ spoken signs with the same meaning can and must be subordinated to the same concepts. Of course, practically speaking, the suggested models can depend on this or that language’s features, especially Latin, but *de jure* one can pose the existence of a totally universal language.

Finally, this theory leads to new ways of analyzing the thought and operations of knowledge. For example, the *Tractatus noticiarum* of Gervasius Waim, at the beginning of sixteenth century, begins with definitions of knowledge and cognitive powers which are reminiscent of those given by Peter Ailly, joining mental representation and signification.²⁵ In the analysis of knowledge and its different types (divine or human, sensitive or intellective, intuitive or abstractive), the vocabulary of intellection and its objects are constantly mixed with that of mental language (categoremes and syncategoremes, subject and predicate, noun and verb).

However, one cannot ignore the fact that these positions, which saw much progress in development and supported a real research program, did encounter some reticence and hesitations. I will mention two examples.

The first one is simply the observation that the analysis of knowledge in terms of mental signs was not replaced by psychological and noetic studies. It was certainly not necessarily their goal, and similarly, we can imagine that new trends coexisted with older approaches, but there is more to it than that. The fact that the theory of species did not disappear is significant (it was defended by both Buridan and Peter of Ailly). Claude Panaccio believes that criticism of the *species*, as constant as it was in Ockham's works, is not a decisive part of his doctrine. Nonetheless, the concept had to be thought of as a sign referring directly to the things and, in Ockham's later theory, its status as a natural sign was based on a direct causal relationship between the thing and the sign itself. If Peter of Ailly's theory of concepts and mental language seems to coexist simply with a quite rudimentary psychology,²⁶ Buridan, for his part, renews the gnoseological functions analysis, including intellection, by reinvesting the key concepts of peripatetic noetics.

We might nonetheless think that there is no incompatibility between these points of view—the logico-linguistic one and the psychological one. The second point I would like to discuss deals however with a real controversy. This issue is well known: some masters noticeably hesitated to accept the idea of a mental language in the literal sense. Indeed, Hugh Lawton, from the 1320s, even rejected the idea of a mental language;²⁷ soon after, William Crathorn admitted that we have an interior language, but only as an image of the exterior language. He also granted that we have universal gnoseological functions, but they are not subject to any analysis in semantic terms.²⁸ We would thus still have to deal with particular languages. Ockham's opponents were sometimes said to have weak arguments. Commentators oppose them with arguments, on the one hand, based on the fact that some basic mental concepts would be common to all men and, on the other hand, based on the requirement of translatability. But this is not the place to discuss these problems, which are still alive today. Historically speaking, the victory of the supporters of mental language was far from complete.²⁹ Of course, we can find some conceptions of mental language in Hobbes or Locke in the seventeenth century,³⁰ but in the meantime, beside the terminist logicians who explored the linguistic structure of thought, a new approach to thought and argument was beginning to assert itself. It took a different approach, which insisted on particular languages and cultures, and which was developed in the humanist *Dialectics* of the fifteenth century (as, for example, in Lorenzo Valla's work). Also in the modern age, while Leibniz explored the idea of a logical construction of thought (but more as calculation than language), Descartes, for his part, reinvested in a conception of representation as a picture.

But these remarks do not in any way invalidate the fruitfulness of the theory of mental language, nor its historical impact. Despite controversies, it has deeply influenced the theory of knowledge and analysis of acts of the mind. The hypothesis of a language of thought is still today a central issue in many discussions about linguistics, semantics, and cognitive psychology.³¹

Notes

1 See Plato, *Theaetetus*, 189e–190a.

2 Panaccio (1999). Among the numerous articles written by Claude Panaccio on this topic, see also (1992, 1996).

3 See Biard (2009).

4 Lenz (2003, 2012). Among the numerous articles on Ockham, and in addition to Claude Panaccio's work, I would mention Trentmann (1979), Spade (1980), Normore (1990), Yrjonsuuri (1997), and Chalmers (1999).

5 Ashworth (1985), and the relevant articles in Biard (2009).

6 Ockham, *Summa logicae*, I.1: 7–9.

- 7 See Panaccio (1999: 53–93).
- 8 See Augustine, *De Trinitate*, IX.7.12: 304.
- 9 Ibid. XV.11.17: 483–484: “Nam etsi verba non sonent, in corde suo dicit utique qui cogita.”
- 10 See *De Trinitate*, XV.10.18: 485: “Nec tamen quia dicimus locutiones cordis esse cogitationes, ideo non sunt etiam visiones exortae de notitiae visionibus, quando verae sunt.”
- 11 See *De Trinitate*, XV.11.20: 486–487.
- 12 See Gregory of Rimini, *Lectura super primum et secundum Sententiarum*, I, Prol., qu. 1, art. 3 (1974, vol. 1: 33); cf. Biard (1997).
- 13 See Ockham, *Summa logicae*, I.1.
- 14 See in particular Ockham *Summa logicae* I, and *Quodl.* V.8 (1980: 508–513).
- 15 See Peter of Ailly (1980a: 89, 1980b, §39: 23):

. . . one concept or act of understanding naturally needs another one and governs it (*naturaliter exigit alium et regit eum*). For example, a verbal concept naturally governs a nominal concept and needs it. And one concept is naturally joined to another transitively or intransitively. Hence it follows that it is by nature . . . that governing and construction pertain to mental terms properly so called.
- 16 This point of view is also strongly expressed in *Destructiones modorum significandi*, attributed without any certainty to Peter of Ailly.
- 17 See Bos and Read (2001).
- 18 See Paul of Gelria, *Tractatus de conceptibus*, in Bos and Read (2001: 122): “. . . dicitur ideo naturaliter proprie significare quia se ipso formaliter et non mediante aliquo signo significat, ut conceptus vel cognitio . . . Signum naturale naturaliter proprie significans est signum immediate potentie cognitive suum significatum representans.”
- 19 See Abelard (1994). This same treatise had already been edited by Ulivi (1976: 101–126). Cf. Panaccio (2010).
- 20 On this topic again, we will first refer to the chapters that Claude Panaccio wrote on Thomas in *Le Discours intérieur* (1999: 179–191). Thomas’s indications are scattered in numerous texts: see, among others, *Quaestiones de veritate* 4.1 and 2, and 4 in 1976: 117–125, 127–129; *Quaestiones disputatae de potentia* 8.1 in 1980: 248–249. See also Paissac (1951) and Kenny (1993).
- 21 See Aquinas, *Quaestiones de potentia* 8.1 in 1980: 249: “Intelligens autem in intelligendo ad quatuor potest habere ordinem: scilicet ad rem quae intelligitur, ad speciem intelligibilem, qua fit intellectus in actu, ad suum intelligere, et ad conceptionem intellectus”; Conception is synonymous with *verbum*: “Haec autem conceptio intellectus in nobis proprie verbum dicitur” (ibid.).
- 22 There is a discussion about to what extent and in which measure such a word can be an intermediary entity between the thing and the mind that knows. On this discussion, see Panaccio (loc. cit., 2001), Michon (2009).
- 23 See *Summa theologiae*, I.85.2 ad 3: “Non ergo voces significant ipsas species intelligibiles, sed ea quae intellectus sibi format ad iudicandum de rebus exterioribus.”
- 24 *Summa theologiae*, I.85.2 ad 3: “Nam primo quidem consideratur passio intellectus possibilis secundum quod informatur specie intelligibili. Qua quidem informatus, format secundo vel definitionem vel divisionem vel compositionem, quae per vocem significatur.”
- 25 Gervasius (1519).
- 26 Peter of Ailly’s *Treatise on the Soul* is brief and quite basic.
- 27 See Gelber (1984).
- 28 See Panaccio (1996), Robert (2009), and Karkkainen (2011).
- 29 See for example Normore (2009).
- 30 Panaccio (2003) and Pécharman (2009).
- 31 See an outline of the debates and of what is at stake in Fortis (1996).

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PART VI

Ethics and Moral Psychology

28

FREEDOM

Tobias Hoffmann

What is free will? What grounds our free will and what threatens it? What increases or diminishes it? How must free will be conceived of in order to account for moral responsibility? These were the principal questions that animated the highly innovative and increasingly complex discussions about free will in the medieval Latin tradition.¹ Other, more particular questions arose from these, such as whether free will consists in the ability to choose between alternatives, whether it implies that the will moves itself, and whether non-human animals are free. There is hardly a question concerning free will that did not prompt a lively and at times passionate debate, for the notion of free will was considered foundational for moral theology and moral philosophy.

To a large extent, the different theories of free will depend on different conceptions of the will and its relation to the intellect (or to reason, that is, to the intellect in its discursive function). In the period considered in this chapter, from the eleventh to the early fourteenth century, three approaches to free will became successively dominant. At first, while most thinkers still conceived of the will in a simplistic way, the main concern was to find an adequate definition of free will which would meet commonly accepted theological requirements. Later, the interest shifted to the psychological foundation of free will. Consequently, the debate centered on the relation between intellect and will and their respective contributions in grounding free will: “intellectualists” saw free will principally rooted in the intellect, “voluntarists” in the will, and others took intermediary positions. Voluntarists outnumbered intellectualists, and among them a theory of free will became dominant that was based upon the conception of the will as a cause that has the unique property of controlling its effects, while all causes other than the will are “natural” causes, which do not control their effects.

Most medieval thinkers hold that free will presupposes the ability to will or do otherwise only when it is narrowly conceived as freedom of choice, to which they generally referred as *liberum arbitrium* (free decision, literally “free adjudication”). Free will broadly conceived does not imply the ability to choose; when one necessarily loves the perfect good, one does so freely. This chapter focuses on freedom of choice. It outlines the most characteristic and influential Latin medieval theories and discusses a few exemplary ones in detail.² The account given here is inevitably provisional, for many medieval texts about free will are still unedited and little studied, including those of thinkers who were very important in their time.

Definitions of Free Decision

In the late eleventh century, Anselm of Canterbury puts a question on the table that will be of central concern for Latin medieval thinkers until about the mid-thirteenth century. What is

free decision (*libertas arbitrii*)? Is its definition the ability to sin or not sin? Augustine had written that free decision enables us to do good and evil (*De correptione et gratia* 1.2, CSEL 92: 220). But Augustine did not define free decision by this ability, for if free decision included the ability to do evil, then it could not be ascribed to God and the saints in heaven, who in fact cannot sin (*Contra Iulianum opus imperfectum* 6.10, CSEL 85/2: 312, cf. *ibid.*: 5.38, CSEL 85/2: 237). In his own writings on freedom, without acknowledging Augustine, Anselm rejects this definition for the same reason: God and the good angels are unable to sin; yet, they are free. In fact, Anselm holds that a will that is unable to sin is freer than one that can be swayed to sin (*De libertate arbitrii* 1, *Opera omnia* 1: 207–208; cf. *ibid.*: cap. 9, *Opera omnia*: 1: 221). According to Anselm, instead of defining free decision by its possible deficiency, one must look to its purpose; and the will's purpose is not to pursue what one wants, but rather what one ought to want (*De libertate arbitrii* 3, *Opera omnia* 1: 211). Accordingly, he defines free decision in a normative sense:

Freedom of decision [*libertas arbitrii*] is the ability [*potestas*] to maintain the rectitude of the will for the sake of rectitude.

(*De libertate arbitrii* 3, *Opera omnia* 1: 212; cf. *ibid.*: cap. 13, *Opera omnia* 1: 225)

If free decision is defined in this way, is it by free decision that one sins? Anselm admits that one sins by free decision, but not insofar as it is free, that is, not insofar as one is able to maintain rectitude. The sense of “free decision” applicable to sins is different from the normative definition reported in the aforementioned quote. The normative definition is in line with a Gospel passage to which Anselm refers (John 8: 34–36), according to which a sinner is a slave to sin, and Christ brings freedom from sin. In addition, however, Anselm tacitly uses a second, descriptive definition of free decision, according to which free decision is understood as the power by which one acts of one's own accord without external coercion.³

In explaining the sin of the devil, Anselm furthermore argues that willing justly or unjustly presupposes alternative possibilities—the ability to will otherwise or, in willing the same thing, to be motivated otherwise.⁴ According to Christian teaching, the angels were created free, and at the beginning of their existence, some angels sinned and others did not. Anselm argues that God gave the angels not only the will (*voluntas*) for happiness, but also for justice. Had God given them only the will for happiness, they would have been neither just nor unjust in willing happiness. In willing to achieve happiness, they would have desired something beyond what God wanted them to desire. Such unbound desire is unjust; even so, the angels would not have been unjust, because they would have so desired of necessity. If instead they had only been given the will for justice, then again they would be neither just nor unjust, because they could not have willed otherwise. For Anselm, the angels could be just or unjust precisely because they were able to will either happiness or justice, or to will something either for the sake of happiness or of justice (*De casu diaboli* 4, 13–14, *Opera omnia* 1: 240–242, 255–258).⁵

In a later work, Anselm clarifies that the will for happiness or justice—which he now calls “affection” (*affectio*)—is a dispositional desire, not an occurrent (that is, actual) desire. He distinguishes the will-as-affection from two other senses of “will”: the will as the instrument (*instrumentum*) by which we will something (that is, the will as a power of the soul), and the will as the employment (*usus*) of the will-as-instrument to elicit an act of occurrent desire. He specifies that it is by means of its affections that the will-as-instrument moves itself to will something particular.⁶

Anselm emphasized the importance of a definition of free decision that addresses theological concerns. Some twelfth-century theologians, including Peter Abelard, show concern about the psychological foundation of free decision by introducing into the discussion a definition that is found in Boethius. Abelard writes:

In order to define free decision (*liberum arbitrium*), the philosophers said: “a free judgment about the will.”⁷

(*Theologia Scholarium* 3.87, CCCM 13: 536)

As Abelard explains, the judgment by which one considers doing or not doing something is free because it is not by nature forced upon those who make the judgment and because they equally have the power to make it or not. Non-human animals, too, can either want something or not, but they lack free decision because they lack the judgment of reason (*Theologia Scholarium* 3.87, CCCM 13: 536). Abelard also proposes his own definition of free decision:

In general and most truthfully free decision [*liberum arbitrium*] is called the ability voluntarily and without coercion to act upon that which one has decreed [*decreuerit*] by reason.

(*Theologia Scholarium* 3.90, CCCM 13: 537)

Abelard writes that God, no less than humans, possesses free decision so defined, and that it is greater in those who are unable to sin than in those who can sin. Abelard cites Augustine, who distinguishes between the free decision of the first man, Adam, who was “able not to sin,” and the greater free decision of the blessed in heaven (who enjoy the beatific vision, the knowing and loving union with God), who are “unable to sin” (*Theologia Scholarium* 3.90–91, CCCM 13: 537–538). According to Augustine, these degrees of free decision are analogous to the immortality of Adam, who was “able not to die” (by not sinning), and the higher immortality of the blessed, who are “unable to die.”⁸ At the root of Augustine’s account is the understanding of freedom as freedom from the slavery to sin (John 8: 34–36), an idea which, as we have seen, also inspired Anselm of Canterbury.⁹

Abelard thus holds that free decision consists precisely in the freely made judgment of reason and in the ability to follow this judgment. By contrast, his contemporary Bernard of Clairvaux locates free decision in the will, which in Bernard’s view can act according to reason or contrary to reason. For Bernard, the will

is not always moved by reason (*ex ratione*), although it is never moved without reason, and thus it does many things by means of reason against reason, that is, as it were with its assistance, but against its counsel or judgment.

(*De gratia et libero arbitrio* 2.3, SBO 3: 168)

If reason could impose any necessity on the will, that is, if reason could impede the will from making its own choice (according to reason or not), then it would destroy the will (*De gratia et libero arbitrio* 2.4, SBO 3: 168). This is, then, how Bernard defines free decision:

This consent [of the will], on account of the will’s imperishable freedom and of reason’s unbending judgment which always accompanies reason wherever it goes, is called, I think not falsely, free decision [*liberum arbitrium*]: it is free of itself because of the will, and it is judge of itself because of reason.

(*De gratia et libero arbitrio* 2.4, SBO 3: 169).

According to Bernard, free decision does not admit of any increase or decrease. Yet as we have seen, for Augustine (and for Anselm and Abelard), there can be more and less freedom. Bernard agrees, but only if freedom is taken to mean something other than free decision. He reworks Augustine’s teaching, which compares the degrees of freedom from sin to the degrees of immortality, into an account of three kinds of freedom: freedom from necessity, freedom from sin, and

freedom from misery. Bernard also calls these, respectively, free decision (*liberum arbitrium*), free counsel (*liberum consilium*), and free delight (*liberum complacitum*) (*De gratia et libero arbitrio* 3.6–7, 4.11, SBO 3: 170–174). The first kind of freedom belongs to human nature and cannot be diminished even by sin (*ibid.*: 4.9, 4.12, 5.15, 7.21, 8.24, and 9.28, SBO 3: 172, 174, 177, and 182–185). The second and third kinds of freedom can be enjoyed more or less fully: freedom from sin is either “being able not to sin” or “being unable to sin”; freedom from misery is either “being able not to be distressed” or “being unable to be distressed” (*ibid.*: 7.21, SBO 3: 182). Through Adam’s sin, the second and third kinds of freedom were lost, and we have become “unable not to sin” and “unable not to be distressed” (*ibid.*: 7.21 and 8.24, SBO 3: 182–183). Through grace, the second kind of freedom is restored, but the third kind is attained only in the heavenly glory, although those who live a contemplative life can have on rare occasions a moderate anticipation of it in this life (*ibid.*: 5.15, SBO 3: 177). Even though salvation, that is, the restoration of freedom from sin and from misery, is above all the work of God, it is not achieved without the consent of our free decision. God cooperates with our free decision not as though grace and free decision were each partly at work, but rather, grace and free decision are each fully at work, yet in such a way that the work of free decision itself originates in grace (*ibid.*: 14.46–47, SBO 3: 199–200).

The definition of free decision most valued among later medieval theologians was transmitted by Peter Lombard, author of the *Sentences*, which he composed in the mid-twelfth century. Though Peter Lombard was not a particularly original thinker, he was immensely influential, because the *Sentences* became in essence the principal theology textbook from the thirteenth to the sixteenth century. His definition of freedom was highly esteemed in part because thirteenth-century theologians thought it was originally by Augustine.¹⁰

Free decision [*liberum arbitrium*] is the faculty [*facultas*] of reason and will by which one chooses good with the help of grace, or evil when grace is lacking. And it is called “free” with respect to the will, which can be turned in either direction, and “decision” [*arbitrium*] with respect to reason, of which it is the faculty or power and to which it belongs to discern between good and evil.

(*Peter Lombard, Sententiae in IV libris distinctae* 2.24.3 n. 1, *Sent.* 1: 452–453)

Peter Lombard also handed on to later medieval theologians Bernard’s teaching on the three kinds of freedom (*Sententiae* 2.25.8–9, *Sent.* 1: 464–469). Another influential idea he passed on is taken from Hugh of St. Victor: we have free decision only about “future contingents,” not about present or past events, because the present and past are fixed and not in our power to change (*Sententiae* 2.25.1 n. 3, *Sent.* 1: 461).¹¹

Clearly, there is no free decision without reason; the task of reason is to know what rectitude consists in (Anselm), to deliberate and judge (Abelard), and to discern between good and evil (Bernard and Peter Lombard).¹² Nevertheless, for these eleventh- and twelfth-century theologians, the role of reason in free decision is rather preparatory and ancillary.¹³ Later, some thinkers will give reason a much more central role with regard to free decision, and how central its role should be becomes a hotly debated question.

The Psychological Foundation of Free Decision

In the thirteenth century, discussions about free will attained an unprecedented philosophical depth, mainly thanks to the contribution of Aristotle’s works which had become available in Latin translation in the course of the twelfth and thirteenth centuries. Although Aristotle did not discuss free decision in its own right, his *Nicomachean Ethics* became a constant point of reference, especially for its accounts of voluntariness, deliberation, and choice, and more generally for the relation between knowledge and action, and between ignorance and wrongdoing. Aristotle’s

theory of causality and motion or change in the *Physics*, his account of the relation between desire and thought in the *De anima*, and his discussion of contingency in the *De interpretatione* further enriched discussions of free decision.¹⁴

Free Decision and the Early Reception of Aristotle

Initially, Aristotle's action theory was known in the Latin West only through the medium of translations of works by Greek theologians influenced by Aristotle. Among these, the mid-twelfth-century Latin translation of John of Damascus's *De fide orthodoxa* was particularly important. It contains an influential treatment of action theory for which John of Damascus largely compiled texts by Nemesis of Ephesus and Maximus the Confessor, both of whom incorporated Aristotelian ideas. Around the same time, the first Latin translation of the *Nicomachean Ethics* was produced, but only books 1–3 and fragments of some other books had survived. (It was not until Robert Grosseteste's translation in 1246/1247 that the *Nicomachean Ethics* would become fully accessible to Latin theologians).

John of Damascus introduces to Latin medieval theologians the notion of the will as a “rational appetite” (*De fide orthodoxa* 36 nn. 8–9, 12, Buytaert: 135–136, 138). The word “appetite” (*appetitus*) is generally understood as the capacity for desire, but it can also mean occurrent desire. He makes an influential distinction between the behavior of non-rational animals, which do not act by free decision, because rather than acting, they are acted upon by nature, and the behavior of humans, who act upon nature rather than nature acting upon them (*De fide orthodoxa* 41 n. 1, Buytaert: 153). John of Damascus also offers a psychological account of choice-making which, with some minor variations, is generally accepted by later authors. First, there is the desire (*voluntas*) for an end, then there are inquisition and examination (*inquisitio et scrutatio*) about whether the end can be achieved by us; if it can, there is deliberation (*consilium*) about how to achieve the end, which leads to the judgment (*iudicium*) about how best to achieve the end, and the decree (*sententia*) by which what is judged best is loved. After that follows the choice (*electio*), that is, the preference of one thing over another. Then comes the impulse (*impetus*) to act, and finally the employment (*usus*), apparently of whatever the action is concerned with. John of Damascus emphasizes that all these steps are free (*De fide orthodoxa* 36 nn. 11–12, Buytaert: 137–138).¹⁵

These ideas found in John of Damascus have their principal root in Aristotle's theory of the relation between wish, deliberation, and choice (*Eth.* 3.2–4) and in his theory of choice as desiderative understanding or intellectual appetite (*Eth.* 6.2, 1139b4–5). Latin theologians appropriated them especially from the thirteenth century onward.

At first, Aristotelian ideas only enriched the traditional inquiry about the definition of free decision, but gradually they transformed the entire approach to the problem of freedom. Philip the Chancellor, building upon the work of his contemporary William of Auxerre,¹⁶ is a key figure in this transition, and many of his ideas echo in the later debate. In his discussion of free decision (*liberum arbitrium*) and freedom (*libertas*) in his *Summa de bono* (composed around 1225–1228), Philip still rarely cites the first three books of the *Nicomachean Ethics* but instead makes ample use of John of Damascus.

Philip starts from Peter Lombard's definition of free decision as the faculty of will and reason by which one chooses good or evil. The principal issues he raises are these. (1) The definition states that free decision is a “faculty”—does this mean that it is a disposition (*habitus*) or a power (*potentia*)? (2) It states that it is a faculty “of will and reason”—are these two distinct powers which are combined in free decision, or are they a single power? (3) Is free decision only in the will or only in reason? (*Summa de bono*, 165–166, 170, and 172).

Philip's response to (3), which he sees confirmed in the definitions of Anselm, Bernard, and Peter Lombard, is that freedom (*libertas*) is primarily in the will and secondarily in reason. It is primarily in

the will, for after reason's judgment that something is good, the will remains free to want it or not. Reason cannot impose any necessity on the will (*Summa de bono*, 173–174). Although reason too is free (as John of Damascus attests; cf. *Summa de bono*, 173), the will is freer than reason, for truth can force reason to consent, but the good cannot force the will to consent (*ibid.*: 177–178). In asserting that the will is not obliged to follow reason, Philip might mean simply that it remains free to abstain from willing after the judgment of reason. Is the will also free to will contrary to reason? On this, Philip is ambiguous. He writes that the will, being a *rational* appetite, cannot contradict reason. Appetite can go against reason, but then it is not “will” (i.e. appetite according to reason), but rather “desire” (i.e. appetite according to imagination) (*ibid.*: 175). Shortly thereafter, he writes that the will can choose contrary to what reason has judged (*ibid.*: 180).

As to (2), for Philip reason and will are essentially the same power, only conceptually (*ratione*) distinct. They are named differently only because judging and willing are different kinds of acts (*ibid.*: 173–174, 179–180).

Finally, as regards (1), Philip argues that whether freedom (*libertas*) is a power or disposition depends on which of Bernard's three kinds of freedom is under consideration: freedom from necessity, from sin, or from misery. The definition of free decision concerns freedom from necessity, which cannot be increased or diminished, and so free decision is defined as a power. In contrast, freedom from sin and from misery can be seen as dispositions of being more or less able to do good and being more or less slave to sin or misery (*ibid.*: 174; cf. 175, 189). So free decision can be defined as *potentia habitualis*, a power endowed with a disposition (*ibid.*: 174).

Philip offers a definition of freedom that applies analogously not only to the freedom of free decision (that is, freedom from coercion), but also to freedom from sin and from misery: “not to undergo any deficiency except by one's own consent.” Philip argues that it is one's own fault not only if one undergoes the deficiency of sin, but also if one undergoes the misery that follows upon sin (*ibid.*: 188–189).¹⁷

Philip is an innovative thinker, but he does not yet offer a coherent account of free decision. In particular, later theologians will clarify the relation between reason and will. In the later debate, the definition of freedom loses its importance; instead, the crucial question will be how to conceive of the will and its relation to reason. Theologians become increasingly divided regarding the respective contributions of reason and will to free decision, and this division partly aligns with the two new religious orders, the Franciscans and Dominicans, which will take as authoritative reference points Bonaventure (later superseded by Duns Scotus) and Thomas Aquinas, respectively.

A New Focus: The Foundation of Freedom in Reason and Will

In the early 1240s, about a decade after Philip's *Summa de bono*, it became common to ask whether non-human animals have free decision in order to clarify its psychological basis. The Dominican Albert the Great argues that non-human animals lack free decision because their judgment and desire are necessary and not open to contraries. In fact, they are fixed upon the sensory good, which is always something determinate. Hence, they cannot help judging something as pleasant or harmful, nor is their desire free to be inclined or disinclined toward what they judge pleasant or unpleasant. Furthermore, free decision, which is the principle of morality, cannot be restricted to the pleasant and unpleasant, but rather must extend to what is noble or base (*honestum vel inhonestum*). Since non-human animals lack the ability to judge the noble and base, they lack free decision.¹⁸ These observations imply that free decision presupposes knowledge of universals (by which one can know something under the general description of good and evil, or of noble and base) and the desire for the universal good (rather than merely for some specific good). Accordingly, sensory knowledge and sensory desire are insufficient foundations for free decision; rather, free decision presupposes reason and will.

How are reason and will related? Albert allows for some independence of the will vis-à-vis reason. Without assigning it central importance, he adopts the notion of the will as rational appetite. Yet for Albert, this does not imply that the will necessarily follows reason, but only that it is supposed to follow reason. In fact, the will follows reason only when it wants to. So the will is not always reasonable (*rationabilis*), but only when it wills what reason has previously determined.¹⁹ Because of the possible discrepancy between reason and will, Albert posits a third power, distinct from reason and will, whose task it is to arbitrate between the “decree of reason and the desire of the will [*decretum rationis et appetitum voluntatis*]” and so to make a choice that follows one or the other. This third power is free decision (*liberum arbitrium*).²⁰

About 1250, the Franciscan Bonaventure likewise clarifies the psychological foundation of free decision by means of the comparison with non-human animals. Free decision requires full control (*dominium plenum*) of what one desires and of the very act of desiring. Control of what one desires presupposes that one’s desire is not restricted to any particular domain, and so it involves the ability to desire not only what is useful or pleasurable, but also what is noble (*honestum*). Since only rational beings can desire the noble, they alone have free decision. To control one’s own desiring implies the ability to desire or not desire a certain thing, and thus to have control over starting and stopping to desire the same thing. Non-human animals lack such control because their appetite is caused not by themselves, but by the desirable thing.²¹ But humans have this control: since the will moves itself, one can start willing something one did not previously will; since reason can reflect upon its own act, one can stop willing what one currently wills. Free decision therefore comprises both reason and will (*In Sent.* 2.25.1.1.3 co., Opera omnia 2: 598b–599b). But for Bonaventure, free decision does not constitute a third, distinct power (*In Sent.* 2.25.1.1.2 co., Opera omnia 2: 596b–597a). In fact, there is no need for an arbiter between reason and will. The will elicits its own act of approval or rejection, or of choice or refusal, to the extent that reason judges doing so as good or evil. Nevertheless, the efficacy of reason’s judgment depends on the will: “the definitive judgment that something ought to happen or not can never exist apart from the will; for no matter how much reason may deliberate, the definitive judgment will come down on the side favored by the will” (*In Sent.* 2.25.1.1.6, Opera omnia 2: 605a–606a). In granting the principal role in free decision to the will rather than to reason or the intellect, Bonaventure’s theory sets the program for voluntarist thinkers of the next generations.

It must be noted, however, that although Bonaventure holds that rational beings have the freedom to choose between alternative possibilities, he does not define free decision by this ability. Free decision is compatible with the inability to do otherwise, and it is experienced in this way by God, Christ, and the angels and blessed in the beatific vision, who cannot but love God and yet love him freely. What is essential to free decision is only that one moves oneself by one’s own command to will something, and this, in turn, implies the second-order willing of one’s own willing (*In Sent.* 2.25.2.1.2 co., Opera omnia 2: 612b). What presupposes the ability to do otherwise is only freedom of choice, which Bonaventure calls “free decision insofar as it deliberates.”

The Will Strictly Conceived as Rational Appetite

Thomas Aquinas, Albert’s student and confrère in the Dominican order, elaborates a particularly rich theory of free decision over the course of his career, which spans from the 1250s to the early 1270s. His theory sets the terms of an energetic debate about the foundation of free decision. Aquinas defines free decision by the ability to choose between alternatives;²² so for him, contrary to Bonaventure, free decision is incompatible with the inability to do otherwise. But the disagreement is merely terminological. Like Bonaventure, Aquinas thinks that freedom, taken in a more general sense, does not require alternative possibilities. For this general notion of freedom, he employs the term “free will” (*libera voluntas*).²³ We desire necessarily to be happy; the angels and

blessed love God necessarily; and God loves himself necessarily. Nevertheless, for Aquinas, these acts are free because the will elicits them without coercion.²⁴

Aquinas develops systematically the idea expressed less explicitly by Albert and Bonaventure that free decision, that is, the freedom to choose among alternatives, follows upon knowledge of universals and desire for the universal good. Aquinas not only assumes the existence of free decision (as a necessary condition for moral responsibility).²⁵ He also argues for its existence directly, since he considers the ability for universal knowledge to be not only the necessary, but also the sufficient condition for freedom of choice. Aquinas reasons that, while knowledge is of universals, the will's acts concern particulars, and so universal knowledge leaves room for willing something particular or not. For example, the realization that one needs a house does not determine the will to want a round house or a square house.²⁶ Hence, a person is free to choose among alternatives and accordingly has free decision.

While the notion of the will as rational appetite is marginal in the writings of Albert and Bonaventure, it is at the core of Aquinas's theory of free decision. As rational appetite, the will follows by nature what reason apprehends as good, just as the sensory appetite follows by nature what the senses apprehend as good. It is, of course, possible to will something evil, but only if it is apprehended as good (*Summa theologiae* 1a2ae.8.1, Leonine 6: 68). It is also possible to act incontinently, that is, to act contrary to one's better knowledge. But an evil will and evil action presuppose ignorance or at least a lack of consideration for what is good and what ought to be done here and now. So when the incontinent act contrary to their dispositional and general knowledge that fornication is evil, it is because their passions prevent them momentarily from realizing that it is not good to commit this act of fornication.²⁷

An important implication of this conception of the will as rational appetite is that there cannot be discrepancy between reason's particular judgment of what is good here and now and what the will desires or chooses at this moment (*De veritate* 24.2 co., Leonine 22: 685). Since universal knowledge of some good does not determine the will to choose something specific, one must deliberate to discover what is worth choosing in this particular situation. The deliberation of reason results in a decree or judgment (*sententia vel iudicium*) that something is to be chosen here and now, and the will's choice follows this judgment (*Summa theologiae* 1a2ae.13.3 co., Leonine 6: 101, and 3a.18.4 ad 2, Leonine 11: 234). Choice does not follow the judgment of reason chronologically, as though there were a gap between what reason judges as choiceworthy here and now and what the will chooses. Rather, Aquinas considers the judgment of reason and the choice of the will to be simultaneous (*De malo* 16.4, Leonine 23: 299.279–281). In fact, they are inseparable, since they are related as form and matter (*Summa theologiae* 1a2ae.13.1 co., Leonine 6: 98; 1a.2ae.17.4, Leonine 6: 121). When we are not ready to make a choice, this simply means for Aquinas that our deliberation has not come to an end and produced a concluding judgment.

That the will's choice follows the judgment of reason implies that freedom of choice presupposes freedom of judgment. For Aquinas, one is free to choose or not choose something precisely because one is free to judge something as choiceworthy or not. He moreover explains that free judgment is rooted in the capacity to judge one's own judgment, that is, to evaluate or re-evaluate how a certain means (typically, a certain action) relates to the end pursued (*De veritate* 24.1 co. and 24.2 co., Leonine 22: 681, 685–686; *Summa theologiae* 1a.83.1, Leonine 5: 307). As Aquinas also puts it, free judgment is rooted in reason's practical deliberation, which can result in this or that concluding judgment (*Summa theologiae* 1a2ae.6.1 co. and ad 2, Leonine 6: 58; 1a2ae.109.2 ad 1, Leonine 7: 291). Aquinas accordingly argues that the root and cause of freedom is reason (*De veritate* 24.2 co., Leonine 22: 685; *Summa theologiae* 1a2ae.17.1 ad 2, Leonine 6: 118).

In his later writings on freedom of choice, Aquinas refines certain ideas. In order to show in which sense the will is not moved of necessity, he distinguishes between two ways in which the will is in potentiality: with respect to the exercise of its act (willing or not willing) and with

regard to the specification (also called determination) of its act (willing this or that). Regarding its exercise, the will moves itself, for in virtue of already actually willing some end (e.g. health), it can move itself to will whatever promotes the end. The will also moves the intellect to exercise its act, for example, to deliberate or to think about something.²⁸ Regarding its specification, the will's act is moved by the intellect, which proposes to it some particular good, for example, seeing a doctor.²⁹ Aquinas argues that nothing moves the will of necessity to exercise its act, because one can always stop thinking about an object and hence stop willing it. As to the specification of its act, the will is moved of necessity only by an object that is good from every point of view; and the only objects that have this characteristic are happiness, or God clearly seen in the beatific vision.³⁰ As we have seen, Aquinas considers the necessary acts of willing these goods to be free, although one cannot will otherwise.

Though Aquinas admits that the will can move itself to exercise its act, that is, to will something after not willing it, he does not think that it can do so by itself. Rather, this self-motion is mediated by the deliberation of reason: for example, when one wants health, one's will moves reason to deliberate about what is conducive to health, and upon the conclusion of deliberation one wants to take medicine. But the desire to start deliberating, in turn, requires a cause: a prior deliberation that this was worth doing, which again must have been initiated by the will. To avoid an infinite regress, Aquinas assumes that this mutual causation of willing and deliberating needs to be traced ultimately to God who acts on the will. He also thinks that tracing it to God does not undermine free decision, but rather grounds it, because God moves the will without necessitating it and without preventing its own contribution.³¹

Whether Aquinas was successful in defending free decision has been debated from his own time up through the present day. While Aquinas gives detailed explanations about why certain choices are not made necessarily, he explains less clearly how one controls whether or not an object appears as choiceworthy, and hence how one controls which choice one makes.³²

While Aquinas dedicates much space to the psychological basis of free decision and to the argument that human choices are not bound by necessity, the traditional problem of finding the most adequate definition of free decision loses the central place it occupied earlier, although Aquinas still dedicates a *quaestio* to it in the *Summa theologiae* (1a.83, Leonine 5: 307–312). Also, Aquinas does not discuss at any length the notion of freedom from sin, although this notion is very important to him. He endorses the Augustinian doctrine that it represents greater freedom to be unable to sin than to be able to sin (*Summa theologiae* 1a.62.8 ad 3, Leonine 5: 118), and he calls freedom from sin the “true freedom” (e.g. *Summa theologiae* 2a2ae.183.4 co., Leonine 10: 449).

Siger of Brabant, an influential philosopher who taught in the faculty of arts at Paris, professed a view about free decision that resembles Aquinas's, although Aquinas seems to attribute to the will a more active role in free decision. Commenting on Aristotle's *Metaphysics* in the mid-1270s, Siger argued that the will is not the first cause of its act, and so something else causes the will's act. This cause is the apprehension of some object, and it causes the will's act necessarily. In fact, Siger cites Avicenna and Aristotle to the effect that every cause, when it is in the disposition in which it is set by nature to produce its effect, produces its effect of necessity. Hence, when a desirable object is present through the knowledge of reason and when it meets the necessary and sufficient conditions to move the will, then the will cannot but will it. Yet, the necessity in the causal relation is not absolute necessity, but only conditional necessity, and therefore Siger considers it no threat to free decision. It is conditional necessity because the causal relation can be impeded by the deliberation of reason, and this guarantees in fact that the will is free.³³ Apparently, what Siger intends to say is that deliberation allows one to revise one's judgment and thus to make a different choice. In any event, according to Siger, as long as reason proposes a particular judgment that something is to be willed or not, the will is determined to will accordingly. The will is free to will otherwise only because reason can judge otherwise.³⁴

Intellectual Determinism?

That free decision is grounded in reason and will was undisputed. But Aquinas's claim that the will's freedom to choose differently is derived from reason's freedom to judge differently became highly controversial, as did Siger's contention that the judgment of reason necessitates the will's act. At the center of the subsequent debate was the question of whether the will's activity is primarily caused by the intellect or by the will itself.³⁵

Some of the opposition was voiced not by argumentation, but by censure. The views of Siger of Brabant and of other arts masters at Paris regarding free decision and other philosophical topics became the direct target of the famous condemnation of 219 statements ("articles") in 1277 by Etienne Tempier, the bishop of Paris.³⁶ Indirectly, some of Aquinas's positions are affected by the condemnation as well. Tempier took a decidedly voluntarist stance by condemning assertions which claimed that the will's acts depend strictly on the judgment of reason, and that an evil will presupposes ignorance. Two condemned propositions received particular attention in the subsequent debate about free decision: "As long as passion and particular science are in act, the will cannot act against them" (art. 129); "If reason is right, the will is also right" (art. 130).³⁷

Reactions that targeted Aquinas's theory of free decision directly and that were brought forth by theology masters rather than by ecclesiastical officials tended to be better articulated. Still during Aquinas's lifetime, Walter of Bruges, a Franciscan and student of Bonaventure, rejected Aquinas's idea of tracing free decision to free judgment. Walter objects that reason, to the extent that it is antecedent to the will, is not free to judge, because reason is bound by the "rules of truth." Walter argues that reason is only free to judge to the extent that it is moved by the will. So the will's ability to prefer (*praeoptare*) one thing over another, which is essential to freedom of choice, is not derived from reason, but rather innate to the will. The will is free, not because it is rational appetite, but rather because it is will.³⁸

Opposition to Aquinas's theory intensified after his death in 1274. For example, in 1278, the Franciscan William de la Mare published the *Correctory of Brother Thomas*, a book critiquing numerous positions of Aquinas, including his views on the primacy of the intellect over the will. Though the *Correctory* is not philosophically profound, it was influential, since in 1282 it became obligatory reading for Franciscans who were authorized to read Aquinas. Dominicans published several responses entitled satirically *Correctory of the Corruptory*.

The most systematic critique of Aquinas's theory of free decision was advanced by Henry of Ghent, a secular priest (i.e. not affiliated with a religious order) whose influence in the late thirteenth and early fourteenth centuries rivaled that of Aquinas. Henry began his prolific career as a master of theology just prior to the 1277 condemnations, for which he helped draft the list of positions to be censured. In his first *Quodlibet* of 1276, Henry further develops Walter of Bruges's critique of Aquinas's earlier account of free decision.³⁹ According to this critique, free decision cannot be traced to free judgment because, unless reason is moved by the will, it is not free. In fact, reason does not control whether or not it apprehends simple concepts, nor whether or not it apprehends self-evident statements or those that necessarily follow from them; as to non-evident statements, reason does not control to what extent it doubts about them.⁴⁰ To safeguard the will's freedom, Henry insists like Walter that the will's freedom is not derived from reason, but rather innate to the will. The will is accordingly free to follow the judgment of reason or not (*Quodlibet* 1.16 co., Opera omnia 5: 103–106). Henry repeats this argument throughout his career; he clarifies that after the adjudication (*arbitrium*) of reason, the will itself makes its own adjudication (*Summa* 45.4 co., Opera omnia 29: 123; cf. *Quodlibet* 1.16 co., Opera omnia 5: 102). In Henry's eyes, Aquinas's mature account of free decision, in which he distinguishes between the exercise and the specification of the will's act, does not fare any better. Henry argues polemically in later *Quodlibets* against Aquinas and his student Giles of Rome, who professes a theory similar to

Aquinas's: if the will depended strictly on reason, Henry argues, then its exercise would be as dependent on reason as its specification.⁴¹ Thus, the problem remains: if reason is not free to judge otherwise, then a will that completely depends on reason is not free to choose otherwise.

Henry still considers the will to be a rational appetite, but he understands this in a broader sense than Aquinas: it only means that the will's choice presupposes the decree of reason and that it can choose something only under the aspect of the good. It does not mean that it necessarily chooses in conformity with the judgment of reason (*Quodlibet* 1.15 co., Opera omnia 5: 93; 1.16 co., Opera omnia 5: 106–107, 110). In fact, Henry later defines the will not as rational appetite, but as “free appetite” (*Summa* 45.3 co., Opera omnia 29: 115). How can the will choose something under the aspect of the good but not as reason directs? An object can appear desirable in simple cognition, prior to the considered judgment that results from deliberation, and the will can act either on that first appearance or on the considered judgment (*Summa* 45.4 co., Opera omnia 29: 123; cf. *Quodlibet* 10.10 co., Opera omnia 14: 256–258). Whatever cognition the will acts on, Henry is adamant from the beginning of his career that the will's choice is not caused by the intellect. The intellect only proposes a desirable object to the will, but it does not move it to will it. The intellect is like a servant who carries a lamp before his master, while the will is the master who directs the servant (*Quodlibet* 1.14 ad 2, ad 5, Opera omnia 5: 89–90). As Henry specifies later, the object presented by the intellect is only a *causa sine qua non* of the will's act, that is, a cause that does not itself efficiently cause the act, but only removes the obstacle impeding the genuine cause from acting. The cognition that presents some desirable object removes the ignorance that impeded the will to *move itself* to its act of willing.⁴²

Henry also clarifies what is at stake in defending the will's sovereignty with respect to reason by considering the relation between deficient knowledge and disordered willing. If one holds, as Aquinas does, that the judgment of reason entails inevitably the corresponding choice of the will, then one must also hold that a disordered will proceeds from disordered reason; therefore if reason is well-ordered, the will cannot be disordered, that is, sinful (*Quodlibet* 1.17 co., Opera omnia 5: 123–124). But according to Henry, there is a counterexample: Adam, the first man, sinned without having first had a disordered reason, for, as Henry and his contemporaries generally assumed on the authority of Augustine, prior to sinning, Adam was not subject to ignorance.⁴³ The sin of Adam must therefore have consisted in willing against the correct judgment of reason. From this example, Henry generalizes that every disorder in reason is ultimately to be traced to a disorder of the will (*ibid.*: 116, 128–129). Only thus can one safeguard moral responsibility: if an evil action is caused by inculpable ignorance, then one is excused, but if an evil action is caused by culpable ignorance—which must be traced to the will that blinded reason—then and only then is one responsible for it (*Quodlibet* 1.17 ad arg., Opera omnia 5: 142). In fact, while Henry thinks that sin does not presuppose disordered reason, he believes that sin always corrupts reason. Hence in his view, a disorder in reason and a disorder of the will are always simultaneous. He therefore later gladly subscribes to a statement by Giles of Rome that the masters of theology at Paris officially endorsed in 1285, the so-called “magisterial proposition,” according to which “there is no evil in the will without error in reason.”⁴⁴ According to Henry, this statement is true not because the error in reason makes the will evil, but rather because an evil will blinds reason. Henry thinks that, if the magisterial proposition is understood in this way, it is not in conflict with the censure of 1277.⁴⁵

While it may appear that Henry is above all interested in defending the ability to do otherwise, his greatest concern is to argue that the will's act has its ultimate source in the will itself, rather than being caused from outside the will. Henry of Ghent systematically develops the distinction between “freedom of the will,” which is compatible with the “necessity of immutability” (i.e. the inability to do otherwise), and “free decision,” which is not. Like his contemporaries, Henry holds that God loves himself necessarily, but freely; the blessed in the beatific vision adhere to

God necessarily, but freely.⁴⁶ Necessity of immutability does not take away freedom, only coercion (*coactio*) does, because it “saddens” the will. What is characteristic for freedom of the will is delight, and what is essential is that the will’s acts have their ultimate source in the will itself rather than being determined or moved from without. For Henry, even in its necessary acts, the will cannot be moved by the intellect or by a natural impulse.⁴⁷ Henry goes so far as to say that even God’s act of willing himself would not be free if, instead of springing from his will, it sprang from God’s nature or from a determination from the willed object, which in the case of God is his own essence (*Summa* 47.5 co., *Opera omnia* 30: 32.203–207). Henry thus distinguishes sharply between will and nature and anticipates a theory that, as we will see, is fundamental in Duns Scotus’s thought.

Henry’s reflections on free decision center on the psychological foundations of free decision. His emphasis on the psychology of free decision leads him to make the problematic assumption of the will’s self-motion:

If by nature the will were moved by something else, then it would be determined to its act without any freedom, and so it would not control its acts . . . therefore it must be said straightforwardly that the will is moved to its act by nothing else, but only by itself.

(*Quodlibet* 9.5 co., *Opera omnia* 13: 130–131)

Henry conceives of the will’s self-motion not in some incidental sense, as though the will only controlled somehow the real mover of the will. Rather, the will’s self-motion is *per se* self-motion, which means for Henry that “it can move and reduce itself from the potentiality of willing to the act of willing” (*Quodlibet* 10.9 co., *Opera omnia* 14: 225). This is a problematic assumption, because it seems to contradict the Aristotelian actuality-potentiality axiom that one and the same thing cannot be in the same respect in actuality and in potentiality (i.e. not in actuality), and that it cannot reduce itself from potentiality to actuality. Aquinas, too, had professed the will’s self-motion, but he had specified that the will is in actuality and in potentiality in different respects; for Aquinas, in virtue of willing an end, the will can move itself to will the means to the end (*Summa theologiae* 1a2ae.9.3 co. and *De malo* 6 co.). In later *Quodlibets*, Henry maintains that the will is not in potentiality and in actuality in exactly the same respect, but he nevertheless denies that the will as mover and the will as moved are really distinct.⁴⁸ Hence, while Henry believes his theory does not violate the actuality-potentiality axiom, he is aware that it violates another closely related Aristotelian axiom, according to which “whatever is moved is moved by another.” But Henry argues that this axiom does not apply to immaterial substances such as the will (*Quodlibet* 13.11 ad arg., *Opera omnia* 18: 131–133).

Henry provoked the strong critique of Godfrey of Fontaines (likewise a secular priest), who becomes master of theology about ten years later than Henry and who is Henry’s biggest rival. Godfrey takes opposite stances on almost every one of Henry’s views concerning free decision. According to Godfrey, Henry’s theory of the will’s self-motion clearly violates the actuality-potentiality axiom.⁴⁹ In Godfrey’s view, the will does not move itself to its act, but it is rather moved by the “cognized good”: the same object that moves the intellect to the act of understanding also moves the will to the act of willing.⁵⁰ For Godfrey, the will moves itself not *per se*, but only incidentally, by moving the intellect to deliberate.⁵¹ But the will’s control of the intellect is, in turn, strictly dependent upon the intellect.⁵² In fact, contrary to Henry, Godfrey denies that the will can act differently from the intellect’s judgment.⁵³ To those who think that free decision is threatened by a theory that rejects the will’s self-motion, Godfrey responds that one must not deny the most certain and primary principles, such as the actuality-potentiality axiom, in the attempt to explain what is metaphysically less primary, such as the psychological foundation of free decision.⁵⁴ What is more, far from safeguarding free decision, positing that the will moves itself

per se threatens free decision, for the will would move itself without being able to control how it moves itself.⁵⁵ Godfrey has his own difficulty, however: to explain how a person controls his or her acts and how the acts can be imputed to the individual, given that Godfrey traces all activity of intellect and will to the things known and willed.⁵⁶

At the same time that Henry and Godfrey debated their extreme views, identifying as total cause of the will's act either the will itself (Henry) or the object cognized by the intellect (Godfrey), Giles of Rome, John of Morrovalle, and others proposed intermediary positions, assigning to both the will and the cognized object an active role in choice-making. But Henry and Godfrey found these attempts unconvincing and critiqued them, each from opposite perspectives.⁵⁷

Nature and Will

Though Henry of Ghent died in 1293, his influence is still strongly felt in the early fourteenth century, when the majority of theologians defend voluntarist positions that depend on various degrees on Henry. As John of Pouilly, a faithful student of Godfrey of Fontaines, witnesses, at that time the intellectualist position was highly unpopular among theologians. He remarks: "Not long ago I saw that in Paris only one man dared to maintain the view I hold."⁵⁸

Duns Scotus, a Franciscan, develops some of Henry's key insights into a particularly original way. Scotus explicitly abandons the notion of the will as a rational appetite and calls the will instead a free power or, occasionally, a free appetite. His conception of the will as free power is a combination of the Aristotelian distinction between rational and irrational active powers (*Metaphysics* 9.2 and 9.5) with Augustine's distinction between nature and will (*De libero arbitrio* III.1.2.9, CCSL 29: 275). Following a point made by Henry (*Quodlibet* 3.17 co., Badius 78vG), Scotus argues that an active power (a power that acts as an efficient cause) is best characterized by the way in which it elicits its activity, not by the object it is concerned with. There are only two fundamental ways to elicit activity: either a power is of such a kind that it is determined to act (by whatever may determine it), without being able not to act when it is so determined; or a power is of such a kind that it is not determined to act, but rather controls whether it does this or that act or whether it does any act at all. Scotus calls the first kind of power "nature" and the second "will." Scotus's example for a power that falls under "nature" is a source of heat.⁵⁹ Every active power other than the will falls under "nature" (*Lectura* 2.25 n. 93, Vat. 19: 261), including intellect, as is shown by a consideration we have already encountered in Henry of Ghent: the intellect does not control whether or not it understands something or whether it assents to or dissents from a proposition.⁶⁰

Since the intellect falls under "nature," and since natural powers are not free, for Scotus, a strictly intellectual appetite would not be free. Scotus admits that the will is in a sense an intellectual appetite, but holds that it is better characterized as a free appetite. He reinterprets Anselm of Canterbury's distinction between the two dispositional desires, the "affection for advantage" and the "affection for the just," as two essential characteristics of the will itself: respectively, "they are nothing but the will itself insofar as it is intellectual appetite and insofar as it is free" (*Ordinatio* 2.6.2 n. 50, Vat. 8: 50). If the will were characterized only by the affection for advantage, that is, if it were only intellectual appetite, then the will would not control its act, but rather would necessarily desire what is thought to be most to the individual's own advantage. But then it is impossible to do otherwise, and therefore desiring only one's own advantage would not count as a sin (nn. 49–51, pp. 48–51).⁶¹

For Scotus, a finite will (that is, a human or angelic will) wills everything contingently. He holds the novel view that even the desires for the ultimate end and the enjoyment of God in the beatific vision are contingent.⁶² As a free power, the will can fail to want to be happy, although it cannot want not to be happy (since in happiness there is nothing evil and no deficiency of good).⁶³ Even in the beatific vision, the will could sin, and thus the blessed could fall away from God, if

God did not impede their will from doing so.⁶⁴ The divine will, too, acts freely in all its acts, but for God this does not imply that God wills everything contingently. As a general rule for Scotus, all of God's acts "toward the outside" (*ad extra*) are contingent (e.g. whether or not God creates, or predestines Peter to happiness), while all his acts "toward the inside" (*ad intra*) are necessary.⁶⁵ For Scotus, necessary willing has three necessary and jointly sufficient conditions: the will must be infinite, the loved object must be infinite, and it must be perfectly known. These conditions are met in God's self-love, by which according to Trinitarian theology, the Holy Spirit is "produced."⁶⁶ So God loves himself necessarily, and the Holy Spirit is produced necessarily. Though necessary, God's act of self-love is free, because it is an act elicited by the will, for which it is characteristic to act freely and not by natural necessity. What this means is that all acts of the will—even if they are necessary—are self-determined by the will.⁶⁷ So for Scotus, what characterizes the will is that it acts freely rather than naturally, not that it acts contingently rather than necessarily. There can be free but necessary acts, but there cannot be free acts that are elicited by *natural* necessity.⁶⁸

William of Ockham develops many of his views about free will and free decision in dialogue with Scotus. Ockham, too, considers the will to be fundamentally distinct from any natural cause: the will alone can produce contrary effects in precisely the same circumstances.⁶⁹ Ockham accordingly calls freedom "the ability by which I can posit indifferently and contingently different alternatives, so that I can cause the same effect or not cause it, without there being any difference elsewhere outside of this power."⁷⁰ But Ockham rejects Scotus's claim that freedom is compatible with the inability to do otherwise, and so he collapses Scotus's twofold distinction between on the one hand freedom and nature and on the other contingency and necessity into a single distinction: for Ockham, what is "free" is "contingent" or "indifferent," and so freedom is incompatible with necessity. Accordingly, *pace* Scotus, the Holy Spirit, who is produced necessarily, is not produced freely (*Ord.* 1.10.2, *Opera theologica* 3: 335–341, 344).

Ockham's most significant departure from earlier thinkers lies in the fact that in his view, the will has no natural inclinations at all, that is, it is not by nature inclined to any one effect rather than to another, nor does it have a natural inclination toward the ultimate end.⁷¹ It can will something evil even if it is not a real or apparent good (*Quaestiones variae* 8, *Opera theologica* 8: 442–444). So the will can want not to be happy, and even in the beatific vision it could want not to enjoy God and reject God. What prevents the will from doing so is the fact that God himself causes the will's adherence to him in the beatific vision.⁷² So Ockham makes a strong link between freedom and the ability to sin, despite Anselm's claim that "being able to sin is not freedom, nor is it a part of freedom." Ockham subscribes to this statement, for God, and (because of God's intervention) the blessed are not able to sin, and yet they are free. But he argues that the ability to sin implies freedom, although freedom does not imply the ability to sin.⁷³

Conclusion

Medieval accounts of freedom and free decision have a strong metaphysical underpinning that most contemporary accounts lack. The human will was thought to be by nature oriented toward the good. In this perspective, the will exists chiefly not to make free decisions, but to attain complete happiness, which consists in the possession of God, the universal good. In adhering to God, the will is free in the sense that it is not coerced, but rather acts of its own accord. This present life is a path toward happiness and the beatific vision, the ultimate end. Free decision concerns particular goods, which move us closer toward our ultimate end (if assisted by grace), or further away from it. Most medieval thinkers hold that while free will in a broad sense is compatible with the inability to do otherwise, free will in the narrow sense requires alternative possibilities. They furthermore hold that without the ability to do otherwise, our actions would not be meritorious. Latin medieval thinkers were by and large in agreement about this general account, which they

received mostly from Augustine and which Aristotle's writings, once available, helped formulate with greater precision.

Within this widely shared outlook, different inquiries were central in different periods. The dominant approach by eleventh- and twelfth-century thinkers was to understand the nature of free decision in light of premises from speculative and moral theology: namely, the fact that God, who cannot sin, has free decision, and yet that free decision is what makes it possible either to sin or act meritoriously. The reception of Aristotle's writings in the thirteenth century allowed for a new approach to free decision, starting not from theological premises, but rather from the nature of intellect and will: since we can consider a particular thing as choiceworthy or not, we are free to choose it or not. The question then became whether choosing is essentially making a rational calculation, and whether making an evil choice is simply a miscalculation. There was a wide consensus that the story must be more complex than this, for the most intelligent person is not necessarily the most moral person. But it was debated what precisely is missing if rational calculation alone does not account for free decision. This debate, in turn, led some fourteenth-century thinkers to put into question certain presuppositions of previous accounts. They expanded the scope of the will beyond the necessary pursuit of happiness and loosened its bond to the good. In so doing, they started a development that profoundly shaped modern and contemporary conceptions of free will, and by implication, of ethics.

Notes

- 1 For theories of free will in the Arabic tradition, see Adamson (2010: 400–406). For more comprehensive treatments of medieval theories of free will in the Latin West, see Lottin (1957), Hoffmann (2021, chs. 1–5), and the studies indicated in note 35.
- 2 Regarding freedom without alternative possibilities, see the overview in Hoffmann (2019).
- 3 Anselm of Canterbury, *De libertate arbitrii* 2, *Opera omnia* 1: 209–210. For an analysis and discussion of the distinction between the normative and descriptive definition of free choice, see Visser and Williams (2004).
- 4 Interestingly, Anselm here avoids calling this ability *liberum arbitrium*; see Kent (2017: 1083, 1086).
- 5 For Anselm's account of voluntary action in *De casu diaboli*, see Ekenberg (2016).
- 6 *Concordia praescientiae et praedestinationis et gratiae Dei cum libero arbitrio* 3.11, *Opera omnia* 1: 279–284.
- 7 Cf. Boethius, *Commentarii in librum Aristotelis Peri Hermeneias* 3.9 (2: 196); Lottin (1957: 22–24).
- 8 Augustine, *De civitate Dei* 22.30, CCSL 48: 863–864; see also *De correptione et gratia* 12.33, CSEL 92: 259.
- 9 See, e.g., Augustine, *De correptione et gratia* 12.35, CSEL 92: 261–262; *Contra Iulianum opus imperfectum* 1.82, CSEL 85/1: 96; *Enchiridion* 28.105, CCSL 46: 106.
- 10 For the widespread view among thirteenth-century theologians that this definition originates in Augustine, see Lottin (1957: 64, note 3). Instead, Peter Lombard took it from the *Summa sententiarum*; see Lottin (1957: 25, 28). Lottin misidentifies its author with Otto of Lucca, a hypothesis which Marcia Colish has demonstrated to be virtually impossible; see Colish (2013).
- 11 Cf. Hugh of St. Victor, *De sacramentis* 1.5, *Corpus Victorinum Textus historici* 1: 125–126.
- 12 Anselm of Canterbury, *De libertate arbitrii* 4, *Opera omnia* 1: 214; Peter Abelard, *Theologia Scholarium* 3.87, CCCM 13: 536; Bernard of Clairvaux, *De gratia et libero arbitrio* 2.4 and 4.11, SBO 3: 169, 173–174; Peter Lombard, *Sententiae* 2.24.3 n. 1, *Sent.* 1: 453.
- 13 The subordinate role of reason is discussed explicitly in Robert of Melun, a student of Abelard; see Perkams (2012).
- 14 For an overview of the translations of Aristotle's works from Greek to Latin, indicating their translators and dates, see Trizio (2010).
- 15 For John of Damascus's action theory, see especially Gauthier (1954); see also Frede (2002).
- 16 William of Auxerre, *Summa aurea* 2.10.1–4, vol. 2: 274–285.
- 17 For Philip's theory of free choice, see McCluskey (2001a) and Saccenti (2013).
- 18 Albert the Great, *De homine*, “De libero arbitrio,” q. 1 arg. 1, co., and ad 1, Editio Coloniensis 27/2: 507.9–18, 508.5–26. Cf. *Summa Halensis* 1a2ae n. 403, 2: 480a–481b.
- 19 Albert the Great, *De homine*, “De voluntate,” q. 2 co. and ad 10, Editio Coloniensis 27/2: 491.14–43, 492.11–19; “De libero arbitrio,” q. 4.2 ad 2, *ibid.*: 522.10–11.

- 20 Albert the Great, *De homine*, “De libero arbitrio,” q. 2 co., *ibid.*: 513.39–514.24. On Albert’s theory of free choice as a distinct power, see McCluskey (2001b).
- 21 Bonaventure, *In Sent.* 2.25.1.1.1 co., ad 3 and ad 4, *Opera omnia* 2: 593a, 594a.
- 22 Aquinas, *Summa theologiae* 1a.83.4 co., Leonine 5: 311; *De malo* 16.5 co., Leonine 23: 304.215–217.
- 23 Aquinas, *De veritate* 24.1 ad 20, Leonine 22: 684; *Summa theologiae* 1a.82.1 ad 1, Leonine 5: 293.
- 24 For the necessary but free desire for happiness, see Aquinas, *De potentia* 10.2 ad 5, in QD 2: 260; *De veritate* 24.1 ad 20, Leonine 22: 684; cf. *Summa theologiae* 1a.81.1 ad 1, Leonine 5: 288; for the necessary but free love of God by the blessed, see *Summa contra Gentiles* 3.138, Leonine 14: 415–416, *Contra doctrinam retrahentium a religione* 13, Leonine 41: C 64.24–28; for the necessary but free divine self-love see *De potentia* 10.2 ad 5, cf. *Summa theologiae* 1a.19.3 co., Leonine 4: 235.
- 25 See, e.g., Aquinas, *De malo* 6, Leonine 23: 148.253–268.
- 26 Aquinas, *De malo* 6 co., Leonine 23: 148.269–296; cf. *De veritate* 23.1 co.; *Summa theologiae* 1a.59.3 co. Leonine 5: 95. For a detailed analysis and discussion, see Gallagher (1991).
- 27 Aquinas, *Summa theologiae* 1a2ae.77.2 co., Leonine 7: 62–63; *De malo* 3.9 co., Leonine 23: 86–87; cf. *De malo* 16.2 co., *ibid.*: 23: 288.261–289.269.
- 28 Aquinas, *Summa theologiae* 1a2ae. 17.1 co., Leonine 6: 118; *De malo* 6 co., Leonine 23: 149.343–354.
- 29 Aquinas, *Summa theologiae* 1a2ae.9.1 and 3, Leonine 6: 74–75 and 77–78; *De malo* 6 co., Leonine 23: 148.308–149.377.
- 30 Aquinas, *Summa theologiae* 1a.82.2 co., Leonine 5: 296; 1a2ae.10.2, Leonine 6: 85–86; *De malo* 6 co., Leonine 23: 149.418–150.449.
- 31 Aquinas, *Summa theologiae* 1a2ae.9.4 co., 9.6 co., 10.4 co., Leonine 6: 78, 82, and 89; *De malo* 6 co., ad 3, and ad 4, Leonine 23: 149.363–416, 150.498–516.
- 32 Some interpreters consider Aquinas to be a compatibilist about free choice (that is, for Aquinas determinism is true and yet we have free choice); see, e.g., Pasnau (2002: 221–233). Others argue that he has a Libertarian account (that is, for Aquinas, we have free choice, and free choice is incompatible with determinism); see, e.g., Hoffmann and Michon (2017).
- 33 Siger of Brabant, *Quaestiones in Metaphysicam* (Cambridge Report), 6.9, Maurer: 320–326, *Quaestiones in Metaphysicam* (Vienna Report) 7.1, Dunphy: 378–386. Siger’s account has striking similarities to an argument briefly discussed by Aquinas; see *De malo* 6 arg. 15 and ad 15, Leonine 23: 146, 151–152.
- 34 Siger of Brabant, *Quaestiones in Metaphysicam* (Vienna Report) 5.8, Dunphy: 330–331. For Siger’s theory of free choice, see Ryan (1983).
- 35 For more detailed studies of these late thirteenth-century debates on free choice, see Kent (1995, ch. 3), Putallaz (1995), Eardley (2006), Perler (2020, chs. 5–6), and Hoffmann (2021, chs. 2–4).
- 36 For a detailed analysis of the relevant articles and their sources, see Hissette (1977).
- 37 The articles condemned in Paris are edited in Piché (1999).
- 38 *Quaestiones disputatae* 5 co. and ad 5, 51–54. Cf. Lottin (1957: 243–247); Lottin points to evidence that Walter Bruges read Aquinas’s *De veritate*.
- 39 For a detailed account of Henry’s indebtedness to Walter, see Decorte (1983); for Henry’s theory of free will, see Teske (2011) and Hoffmann (2021, section 3.2).
- 40 Henry of Ghent, *Quodlibet* 1.16 co., *Opera omnia* 5: 107–108; cf. *Summa* 45.4, *Opera omnia* 29: 124.
- 41 Henry of Ghent, *Quodlibet* 9.5 co., *Opera omnia* 13: 123.2–6; *Quodlibet* 10.9 co. ad arg., *Opera omnia* 14: 239.98–00; *Quodlibet* 12.26 co., *Opera omnia* 16: 150–151. For Giles’s theory to which Henry responds, see Giles of Rome, *Quodlibet* 3.15, 176–180; for a discussion, see Eardley (2003, 2016).
- 42 Henry of Ghent, *Quodlibet* 10.9 co., 14: 225–226; *Quodlibet* 12.26 co., *Opera omnia* 16: 152–153; *Quodlibet* 13.11 co. and ad arg., *Opera omnia* 18: 88, 131. On the notion of *causa sine qua non*, see Solère (2014).
- 43 Cf. Augustine, *De libero arbitrio* 3.18.52.177–179, CCSL 29: 305–306.
- 44 R. Wielockx (1985: 79–80) argues that the “magisterial proposition” was conceded in 1277, but in a forthcoming publication, S. Dumont provides solid evidence that it was conceded only in 1285.
- 45 Henry of Ghent takes great pains to reconcile the affirmation of the magisterial proposition with the condemnation of articles 129 and 130 (cited in note 36); see *Quodlibet* 10.9 ad arg., 10.10 co., 10.13 co., *Opera omnia* 14: 245–248, 258–271, and 287–289.
- 46 Henry of Ghent, *Quodlibet* 3.17 co. and ad arg., Badius: 78vG and 79rH–K; *Quodlibet* 9.5 co., *Opera omnia* 13: 135; *ibid.*: 47.5 co., *Opera omnia* 30: 26–27.
- 47 Henry of Ghent, *Quodlibet* 3.17 co. and ad arg., Badius: 78vG and 79rI; *Summa* 45.3 co., *Opera omnia* 29: 119; *ibid.*: 47.5 co., *Opera omnia* 30: 27; *Quodlibet* 14.5 co., Badius: 565rB.
- 48 Henry of Ghent, *Quodlibet* 10.9 ad arg., *Opera omnia* 14: 231; *Quodlibet* 12.26 co., *Opera omnia* 16: 154–155; *Quodlibet* 13.11 ad arg., *Opera omnia* 18: 127–133.
- 49 E.g., Godfrey of Fontaines, *Quodlibet* 6.7 co., PhB 3: 149; *Quodlibet* 8.2 co., PhB 4: 19–20.

- 50 Godfrey of Fontaines, *Quodlibet* 6.7 co., PhB 3: 163, 170; *Quodlibet* 10.13, PhB 4: 375.
- 51 E.g., Godfrey of Fontaines, *Quodlibet* 6.7 co., PhB 3: 161; *Quodlibet* 8.16 co., PhB 4: 156; *Quodlibet* 15.4 co., PhB 14: 28–29.
- 52 E.g., Godfrey of Fontaines, *Quodlibet* 6.10 co., PhB 3: 209; *Quodlibet* 10.14 co., PhB 4: 380.
- 53 E.g., Godfrey of Fontaines, *Quodlibet* 6.11 co., PhB 3: 220; *Quodlibet* 8.2 co., PhB 4: 22.
- 54 Godfrey of Fontaines, *Quodlibet* 6.7 co., PhB 3: 170. Cf. Wippel 1973.
- 55 Godfrey of Fontaines, *Quodlibet* 15.4 co., PhB 14: 26–28.
- 56 Cf. Godfrey of Fontaines, *Quodlibet* 10.13 co., PhB 4: 373 and 376; *Quodlibet* 15.4 arg. 3, PhB 14: 21.
- 57 For these intermediary theories and their critique by Henry and Godfrey, see Hoffmann (2021, ch. 4).
- 58 John of Pouilly, *Quodlibet* 2.13 (second redaction), quoted in Hoffmann (2021, section 5.2).
- 59 Duns Scotus, *Quaestiones super libros Metaphysicorum Aristotelis* 9.15 nn. 21–22, n. 25, OPh 4: 680–681.
- 60 Ibid.: n. 36, OPh 4: 684–685.
- 61 On Scotus's transformation of Anselm's affections-theory, see King (2010).
- 62 Duns Scotus, *Ordinatio* 1.1.2.2 n. 80, nn. 143–145, Vat. 2: 60, 96–97; *Ordinatio* 4.49.1.6 n. 341, Vat. 14: 375.
- 63 Duns Scotus, *Ordinatio* 1.1.2.2 nn. 82, 85, 149, Vat. 2: 62–63, 100.
- 64 Duns Scotus, *Ordinatio* 4.49.1.6 nn. 352, 364–371, Vat. 14: 378, 380–383.
- 65 Duns Scotus, *Ordinatio* 1.2.2 n. 239, Vat. 2: 272; *Quodlibet* 16 n. 39, in Noone and Roberts (2007: 179–180).
- 66 Duns Scotus, *Quodlibet* 16 nn. 6–7, *ibid.*: 162–163; *Ordinatio* 1.10 nn. 47–49, Vat. 4: 359–361.
- 67 Duns Scotus, *Quodlibet* 16 nn. 36–37, 62–63, in Noone and Roberts (2007: 178–179, 192–193).
- 68 Duns Scotus, *Quodlibet* 16 n. 40, *ibid.*: 180. For Scotus's twofold distinction of will/nature and contingency/necessity and for its early reception by Franciscan thinkers, see Alliney (2015).
- 69 Ockham, *Expositio in librum Perihermeneias Aristotelis* 2.7 n. 5, Opera philosophica 2: 481; *Expositio in libros Physicorum Aristotelis* 2.5 n. 9 and 2.8 n. 1, Opera philosophica 4: 290 and 319–322.
- 70 Ockham, *Quodlibet* 1.16, Opera theologica 9: 87; cf. *Ord.* 1.1.6, Opera theologica 1: 502.
- 71 Ockham, *Ord.* 1.1.6, Opera theologica 1: 507; *Quaestiones in Tertium Librum Sententiarum* 3.6, Opera theologica 6: 175; *Quodlibet* 4.1, Opera theologica 9: 300.
- 72 Ockham, *Ord.* 1.1.6, Opera theologica 1: 503–507; *Quaestiones in Quartum Librum Sententiarum* 4.16, Opera theologica 7: 350–353.
- 73 Ockham, *Quaestiones in Quartum Librum Sententiarum* 4.16, Opera theologica 7: 354–355. For a more detailed account of Ockham's theory of freedom and for its implications, see Adams (1999).

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REASONS AND ACTIONS

Anthony Celano

The medieval theory of moral actions has its origins in Aristotle's concept of right reason and Augustine's notion of free choice (*liberum arbitrium*). For Aristotle practical choices mimic the deductive process of theoretical reason in which a particular option may be deduced from a universal proposition. The logically deduced conclusion combines an awareness of a universal moral principle with the recognition of a relevant particular instance. Aristotle himself refrains from providing specific examples of universal ethical imperatives, most likely because he bases his moral philosophy on human practice. His examples, however, do illustrate the nature of practical moral reasoning, as in the rules that stagnant water is to be avoided as unhealthy, and that light meat is beneficial. In the discovery of both the universal and particular premises, experience is a fundamental requirement, since there is no *a priori* knowledge of either proposition. Only after repeated experience, reflection and teaching, can one accept the truth of the statements that stagnant water is unhealthy and that this body of water is indeed stagnant. The awareness of both premises provides the basis for the judgment that one should not drink this water. The most basic formulation of universal moral principles would be that human actions should seek to produce happiness, and these actions are conducive to that end. Again experience is required to recognize those actions that produce happiness, and if the required background is operative, then the agent would always choose correctly.

Aristotle recognizes that human beings do not always follow the dictates of right reason, and he explains moral weakness as an error in the process of practical reasoning. In book VII of the *Nicomachean Ethics* he indicates that a weak person primarily errs with respect to the minor premise. Although Aristotle does recognize the possibility of absolute moral reprobation in intemperate persons, who believe that their evil choices are justified, he considers the problem of moral weakness (*akrasia* or *incontinentia*) to be far more common. Morally weak persons do not think that what they do is right (*Nicomachean Ethics*, 1146b22–24), but overcome by unrestrained desires or passions, they choose to ignore the dictates of a rational moral principle (*Nicomachean Ethics*, 1147b6–12). Unlike Socrates, who determines such a choice to be the result of faulty intellectual reasoning, Aristotle understands that a particular choice (*prohairesis*) may be made in spite of the intellectual awareness of moral principles. One may accept intellectually that drinking to excess is to be avoided, but a desire to enjoy a night out with friends may obscure the acceptance of the final term of the practical syllogism, which would command a cessation of drinking at a reasonable point.

Christian moral theory accepts the basic idea of Greek philosophy that all humans seek a single end. In Christian moral thought the single goal is perfect beatitude, which consists ultimately in

the soul's union with God. Christian moralists, however, attempt to explain the decision-making process with the concept of the will, since they were convinced that the exalted faculty of reason could not be led astray by the far inferior powers of emotion and desire. Augustine, whose writings are more influential in the Middle Ages than any source other than the Scriptures, was particularly important for the development of a new Christian theory of moral action. M. Clark describes his contribution as follows:

The moral theory of Augustine was both like and unlike that of the Greek philosophers. It was like Greek moral theory in placing happiness as the end of all human striving, and it was like the Neoplatonic philosophers in relating human goodness to a choice of greater over lesser goods, with God as the true source of happiness. Unlike the Greeks, who emphasized knowledge and self-sufficiency, Augustine taught that the human person reaches union with God with God's help by loving him in response to his love . . . He emphasized right will in addition to true knowledge as the way to happiness of being united to God.

(Clark 1994: 42)

Augustine, certainly aware of the conflicting desires that marked his early life, was particularly interested in an explanation for the human dilemma of willing what is not good presented by Paul in Romans 7: 19–25: “For the good which I will, I do not, but the evil which I will not, that I do . . . But I see another law in my members, fighting against the law of my mind.”

Augustine determines the final element in action to be the will which provides human beings with autonomy, self-determination, and the ability to choose between right or wrong. Although he accepts the Stoic idea of a natural cognition of universal principles of eternal law, Augustine also recognizes the will's ability to accept or reject its dictates. Rather than attribute moral error to an intellectual failure, he explains it in terms of the will's free decision to choose between alternatives. J. Müller notes that Augustine recognizes the ancient concept of the rational striving toward a recognized good, but after the fall of Adam, reason is not strong enough to determine right action without the assistance of divine grace. Augustine introduces a new idea of decisive wanting, which ultimately directs the conflicted will toward a particular action. The human will is the crucial factor in Augustine's moral theory, providing the basis for freedom and individual responsibility (Müller 2009: 362). The good will is the cause of “turning and adhering to” the perfect being rather than to a less than perfect one, and the evil will is a desertion or rejection of God (*De civitate Dei* XII.9). The concept of will allows Augustine to explain how any person may freely disobey the moral law, even though one may recognize intellectually its obligatory nature.

In the eleventh century Anselm of Canterbury refines Augustine's theory of free choice through his distinction between the desire for what is beneficial (*affectio commodi*) and the desire for what is just or right (*affectio iustitiae* or *rectitudinis*: *De libero arbitrio*, c. 3). The desire for what is beneficial may conflict with the pursuit of justice, and Anselm's acceptance of two ends that dictate two different courses of action provides the explanation for the will's ability to choose freely (Brower 2004: 244). Freedom of choice is given to rational beings to act in accordance with rectitude for its own sake, and in such freedom consists justice, which is always the goal of a good will (*De libero arbitrio*, c. 3). In language that is similar to that of Kant, Anselm argues that a truly free choice is one that maintains the will's rectitude for the sake of rectitude itself and is not one that benefits the agent. (*De libero arbitrio*, c. 3 and 10). The will of an evil person appears to be a servant to the desire for what is pleasant and the pursuit of pleasure makes a person a slave to sin (Goebel 2006: 109–110; *De libero arbitrio*, c. 10: *Quomodo peccans sit servus peccati*). A free rational being with moral rectitude is neither subject to, nor a servant of, what is not fitting. The rational will can only be turned away from right when it consents willingly to what it should not. Without volitional consent no external temptation can overcome the will's freely chosen path of rectitude

(*De libero arbitrio*, c. 5). Anselm deems no one free who is compelled by the passions to do wrong, since human volitional liberty consists perfectly in the choice of what is right. The recognition of what is just leads to the will's acceptance of its compelling force in human judgments.

The will for happiness or beatitude does not innately include the limits that justice provides. Justice and rectitude require that the human will subordinate itself to God (*De casu diaboli*, c. 14). Anselm claims that no will is just, except that one which wills that which God wills that it will (*De libero arbitrio*, c. 8). The conflict between an inordinate desire for individual happiness and the will to act in accordance with rectitude reflects again human volitional freedom. While in God's unified nature the coincidence of beatitude and justice assure absolute harmony in the divine will, in the human dichotomy between soul and body conflict is inevitable. The desire for beatitude cannot, in Anselm's view, be entirely wrong because it is a universal human desire, which is impossible to ignore (*De casu diaboli*, c. 4 and 13). An inordinate wish for individual beatitude may at times conflict with the demands of justice, especially in regard to others, but ultimately justice and beatitude must coincide, since the will's choices to commit just acts must lead the agent to a state of moral goodness (*De casu diaboli*, c. 12). Anselm recognizes a possible conflict between the individual human desire for beatitude and the demands of just dealings with others.

In the twelfth century Peter Abelard identifies the most relevant factor in moral action to be an interior act of consent and rejects the intellectual foundation in ancient Greek theories of ethical behavior (*Ethica*, c. 1). In themselves, persons, passions, or even desires cannot be evil since they are parts of human nature (*Ethica*, c. 3). The course of moral choosing is not an intellectual process aiming at a beneficial state, but rather a volitional procedure directing the soul to exercising free choice. One may have urges arising from corporeal weakness, but the will may refrain from the consequences, and consent to direct action in accordance with divine law. Only when consent is given to actions that contravene the law of God, can such acts be called truly sinful. For Abelard baser impulses may be accepted or rejected, and even an evil will without consent does not constitute sin.

Abelard divides human desires into those which please (*placere*) and those which are rationally appropriate (*approbare*). Conflict may arise in either type of human desires. In the same action of seeking pleasure one may covet physical pleasure but be repelled by feelings of guilt or fear of punishment. In the higher form of wanting, which pursues what reasons display as good, one may act against one's own conscience. When such a seemingly irrational action occurs the appetitive desire overwhelms the dictates of reason. Herein lies the ability of a human being to make a free choice and to give consent to an act which appears irrational (Müller 2006: 129–133).

Sin, Abelard argues, can be committed without an evil will, and, as such, should not be considered identical to willing itself. Abelard provides an example of a man desirous of a beautiful woman, who restrains himself through the power of temperance. He does not completely destroy the will to sin, but triumphs in his struggle by subjugating his will to the divine one. The intention of the moral agent is here the determining factor, and the deed itself adds nothing to the merit or fault of the agent (*Ethica*, c. 3). Abelard accepts the force of human desires, and says, to be without desire is impossible due to the weak nature of human beings. The sin consists not in desiring a woman, but in the consent to that desire, regardless of the success or failure of an attempted seduction. Consent to do what should not be done, or sin, is hatred of God and the violation of divine law (*Ethica*, c. 3: "Sin is to disdain the Creator, that is, in no way to do what we believe we ought to do on account of Him, or not to give up what we should give up on account of Him"). In acting against the conscience of what should be done for the sake of God sin results (*Ethica*, c. 1). Abelard rejects the epistemic status of practical judgment that is part of Greek thinking, as J. Müller notes. Abelard views the conscience as the ability to recognize manifest truths, but this ability does not preclude error, since one can sin against awareness. Abelard understands such mistakes to contravene belief more than knowledge (Müller 2006: 125–126). Free choice consists in

the soul's ability to reflect and to judge what one should do, and finally whether one should accept or reject the conclusions of reflection and judgment.

The Latin translations of Aristotle's *Nicomachean Ethics* and the Greek commentaries that appeared in the late twelfth and early thirteenth centuries provided an impetus for a renewed interest in, and more extensive treatment of, moral questions. Early in the thirteenth century, authors such as William of Auvergne and Philip the Chancellor located the universal principles of moral reason that are identical with the eternal law in the human innate power, or habit, of *synderesis*. Every single person has an innate ability after certain experiences to recognize the infallibility and immutability of certain moral principles. The dictates of *synderesis* form the major premises of the practical syllogism in the theories on moral choice of Albert the Great and Thomas Aquinas (Celano 2007).

Like William of Auvergne, Albert understands a text from Paul to allow for the introduction of the idea of *synderesis* into the discussion on correct moral laws. In them there can be no error or doubt, since the natural ability to judge is formed by reason and *synderesis*. So formed, the critical faculty of judgment knows what to do (*De bono* V q. 1 a. 1). Such universal principles are clearly expressed in the decalog, and individual tenets are the belief in one God, to honor one's parents, not to kill, and the like. These commands are universally taken from natural and written laws (*scripta*) and are comprehended by that power which responds to reason. Albert compares the process of acting in accordance with natural law to the process whereby the speculative intellect is perfected. The intellect contains a twofold power before it receives an act of knowledge: a potency to know the instruments of knowledge and the power of knowledge itself. The instruments of knowledge are the first principles of science. The same process holds for the development of a habit of the practical intellect which directs actions. In the knowledge of law the first potency is directed toward its universal principles. Albert argues that before the moral habit can develop there must be knowledge of the terms of the universal imperatives. He says that the knowledge of principles, such as do not steal or commit adultery, is acquired *per accidens*, that is, through the recognition of terms. Because there is no prior understanding, knowledge of such terms is instilled naturally and acquired by subsequent recognition. The meaning of Paul on the topic is that justice is known by the form of justice impressed upon all those whose life and actions conform to the dictates of the universal commands. In this way one develops a habit of natural law (*De bono* V q. 1 a. 1).

Natural law may be a habit, but not one that in itself is sufficient to produce action. Augustine's definition of a habit as that by which someone acts as desired refers to a complete habit that has no trace of potency. This type of habit is not one of principles, by whose possession one is led to action. The innate cognition of the imperatives of natural law leads only potentially to corresponding actions which need to be aligned with the dictates of right reason. The potency of the natural habit is actualized when specified by the particulars of human positive law (*De bono* V q. 1 a. 1).

In the consideration of ethical behavior Albert argues that the practical and speculative intellects are substantially united, but differ in nature because of the distinction between truth and goodness. The nature of the practical intellect encompasses goodness, action and the appetite. Goodness is the prime mover of the appetite, since the good moves that which first perceives it. The practical intellect is the power by which the good is apprehended and pursued. The perceived good is actual and operable and consists in a particular act, since every action must be an individual choice. The good presents itself only insofar as it is desirable, and for this reason the intellect moves the appetite to pursue the good. This process is the reason for Aristotle's statement that only the appetitive element in the soul can move one to action (*De homine*, 485).

Choice determines moral character and is the fulfillment of one potency, which is free choice (*liberum arbitrium*). Albert calls choice a power different from both reason and will (*voluntas*), but it participates in each. Free choice flows from both reason and the will in that the judgment needed comes from reason and free desire from the will. Desire exists formally in the judgment and in the

last act in the process itself. The free choice needs judgment since it seeks something desired for the sake of a further good, whereas the will's appetite simply pursues something for its own sake (*Super Ethica*, 154). Operations or actions generate the virtues only insofar as they have the mode of reason. This rational mode is ascribed to virtues by way of choice, which is the first factor in conveying the virtuous quality. A moral judgment derives its nature to the highest degree from choice (*Super Ethica*, 155). Choice, as it designates the act, belongs to prudence as it is performed, just as the operation of prudence and reason is incorporated within every virtue because all virtues take their form from rational prudential activity (*Super Ethica*, 155).

To choose (*eligere*) is an act of free choice (*liberum arbitrium*) which is a potency between reason and will and has something from each power, but the formal nature of choosing comes from the will (*Super Ethica*, 160). To prefer one thing over another in judging and to determine what ultimately should be done belongs to reason, which works in a manner consistent with the decisions in theory or art. To prefer something by accepting it through the appetite is to choose, which does not belong to reason. Sometimes reason's judgment may be ignored even though it always presents a correct principle. Choice that may be correct or wrong is reduced to a principle that is able to be changed or corrected, and this ability to change a decision makes choice free. The object of deliberation is the same in subject as the object of choice, but differs in that the former has the form of reason, while the object of choice always involves the will as well (*Super Ethica*, 160).

The will whose object is goodness does not determine the good, but rather is made good by the pursuit of what is simply good. Albert here follows the doctrine of Cicero who calls simply good actions honorable or proper (*honesta*) because they attract and compel one by their intrinsic force and not merely by their appeal to the human will (*Super Ethica*, 165–166). All human beings because of the nature of reason have the capacity for moral integrity, but only those who have developed the proper moral habits are said to have perfectly achieved moral rectitude.

One may do wrong by making a choice that is somehow based in ignorance, but ignorance does not constitute the reason for choice, because an evil person may know the proper reason, but choose to act improperly. An appetite for something contrary to good may overwhelm a person to the extent that one cannot rightly apply the universal reason to a particular act. One is not unaware of the universal proposition but is deceived in the application of the minor premise or conclusion (*Super Ethica*, 146). The wrongdoer has knowledge of the action that he chooses to commit but remains ignorant of the rectitude of reason as it is applicable to a particular act through choice. Such ignorance of evil removes the practical knowledge that regulates action but does not destroy theoretical knowledge that characterizes consideration and the syllogistic process. All people are bound, and able, to know universal principles, because all have a path to them provided by reason itself (*Super Ethica*, 146).

Thomas Aquinas develops the ideas of his former teacher, Albert, when he argues that moral choice follows a judgment that functions as a conclusion in the practical syllogism. The end in all practical decisions functions as a first principle and not as a conclusion. The end insofar as it is an end does not fall within the elective process (*electio*). Just as nothing prevents a speculative principle of one science from being a conclusion in another, no end in one decision is prohibited from being ordered to a further goal. In medicine, for example, health is the end about which no doctor deliberates. The physician intuitively the goal of restoring or maintaining health and selects the proper means. Bodily health, however, may be ordered to the good of the soul, and one entrusted with the care of the soul may at times have to sacrifice corporeal health for a superior end (*Summa theologiae* I-II.13.3). No one can choose what lies beyond one's abilities or power to accomplish. The will is the bridge between the intellect and the external operation, since the intellect proposes its object to the will, which in turn is the motivating force to action. The intellect which comprehends something as good in the universal sense drives the will to action. The perfection of the voluntary action develops according to the order leading to the operation by which one strives

to attain the object of desire. The voluntary act's perfection results from the performance of some good which lies within the agent's power (*Summa theologiae* I-II.13.5 ad 1).

The will can choose freely since it may decide to act or not to act. Only beatitude, which reason recognizes as perfect, involves a certain necessity, since no one could prefer misery over blessedness. Because the will's choices concern the means to beatitude, it may reject any particular good as not conducive to this end (*Summa theologiae* I-II.13.6). Everything which has intellectual cognition has an appetite proportionate to this awareness. This type of cognitive appetite is the will. The will as appetite is not proper to the intellectual nature, but rather is related to it only as it depends upon the intellect. The intellect itself is that which determines an intellectual being. The intellect moves the will *per se* and primarily because it presents the perceived good to the voluntary potency. The will moves the intellect as if accidentally (*quasi per accidens*) in that what is understood as good is desired by the will. The intellect must act by presenting the object as good in order for the will to desire it (*Summa contra gentiles* III.26.22).

Choice presupposes deliberation about matters that have some measure of uncertainty. If there are fixed ways to determined ends as in certain arts, there can be no deliberation at all. A scribe does not deliberate concerning the structure of letters because the scriptorial art determines the manner in which he writes. Choices that affect minimally the acquisition of the end require no deliberation, since reason pursues the best course to the desired goal (*Summa theologiae* I-II.14.4). For such reasons no one deliberates about beatitude which moral science proposes, and reason accepts immediately as the proper end for all endeavors (*Summa theologiae* I-II.14.6). The will's goodness depends upon the object that reason proposes. The will has the ability to aim at the universal good that reason comprehends, and so the will depends upon reason as it depends on its object (*Summa theologiae* I-II.19.3). Human reason becomes the measure of the will by which its goodness is calculated because of the eternal law of divine reason. The light of reason in human beings, as it displays goodness and rules the will, depends upon the reflection of the divine countenance. The goodness of the human will clearly depends more upon eternal law than upon human reason. Where human reason fails there must be a turn to eternal reason (*Summa theologiae* I-II.19.4). As it exists in the mind of God the eternal law is unknown to human beings, but it can be known somehow either by natural reason or through revelation (*Summa theologiae* I-II.19.4 ad 3).

The intention to attain a proper end ultimately leads the will to the supreme good, which is God. A requirement for voluntary goodness is the order that leads to this good. Since the first element in any genus is the measure and rationale for all subsequent elements, what is right and good is judged in relation to the principle of all goodness. As a result the human will can be good insofar as it conforms to, and imitates, the divine will (*Summa theologiae* I-II.19.9 and I-II.19.9 ad 1). Human beings can know the divine will in a general way (*secundum rationem communem*) because whatever God wills, He does so under the nature of goodness. No one, however, can know what God wills particularly (*Summa theologiae* I-II.19.10 ad 1). In voluntary actions the proximate regulative principle is human reason, but the supreme principle is the eternal law. Whatever human act proceeds to the end according to the order of reason and according to the eternal law is right. Actions that do not proceed in this way are always wrong (*Summa theologiae* I-II.21.1). Aquinas does not envision any conflict between the regulatory forces of reason and the eternal law, since their principles are identical.

Both Albert and Aquinas attempt to explain how reason may fail to function in a rational manner and thus produce incorrect moral action. For Albert the failure is one of reason because the agent may perceive the minor premise, but does not really know its relevance due to the influence of passion. The morally weak person does not intend to do wrong and his act is not the result of will, but rather unwanted ignorance (Tracey 2006: 212–213; Muller 2009: 507). Aquinas generally agrees with Albert's understanding of moral weakness wherein the general moral principle is obscured in a specific instance because of the effect of passion (*Summa theologiae* I-II.77.2). Aquinas,

however, grants a larger role to the will in such decisions, since choice consists in the will's selection according to pleasure. Reason itself can never be the efficient cause of human choice, which depends upon the will, but is rather the final cause of action in its function as proposing and judging any goal as good (Müller 2009: 514).

Other writers of the thirteenth and early fourteenth century rejected the idea of primacy of the intellect in the process of moral decisions. Henry of Ghent, a secular master, and Peter Olivi, a Franciscan, insisted upon the self-determination and freedom of the human will. For them the will is the foundation of human freedom because only it has the power of self-determination (Kobusch 2006: 253–257). Henry of Ghent identifies the habit of the will to be charity and that of the intellect to be wisdom, and their respective acts to be love and knowledge. The will commands the intellect to consider, or deliberate about, what it wills, and so the intellect in no sense can command the will. The desire to know must always precede the principles of knowledge (Stone 2003: 206). John Duns Scotus sees a fundamental distinction between the natural power of the intellect and the autonomous capacity of the will. T. Noone observes that the intellect

is necessarily determined to follow the conclusion presented by the evidence considered and cannot determine itself to one course of practical action over another; reason, accordingly, can be only improperly termed a rational power since its act is required for and ordered to the activity of the truly rational power, the will. That is why, for Scotus, will is the only faculty subject to moral evaluation in terms of good and evil.

(Noone 2006: 294)

While the intellect must follow necessarily the path of its reasoning, the will may accept or reject any end including the desire for union with God. Human volitional freedom consists in this ability to reject any end (*Reportatio Parisiensis IIA* d. 39 qq. 1–4, n. 5: *Intellectus practicus est, qui necessario assentit agibilibus, voluntas autem libere*).

Scotus denies that human beings always act for the sake of happiness, since only the will can determine the character of the desired end. J. Müller observes that as a natural power the will is directed toward beatitude, but as free it cannot want the end necessarily, since it can wish for something different. The intellect can display an end and is thereby only an instrumental cause, or a *causa sine qua non*, since only the will can truly move a human being to action (Müller 2009: 653 and 716). The natural will is not will at all and to will naturally is not willing because the designation, “natural,” negates both the will and willing. Natural will designates an inclination toward the advantageous, but the will in order to be free must have the power to perform or not to perform the act conforming to this inclination. Natural will is then merely a tendency and not a willing at all (*Ordinatio* III d. 17, in Wolter 1986: 182–183). Like Anselm Scotus identifies two desires within the human will: one directed to justice and the other toward the advantage. In the desire for justice or rectitude the will expresses most fully its innate liberty. When the will turns from a good not ordered to itself and seeks what is merely advantageous, it produces only an intellectual appetite that is bound to follow intellectual perception. To love something for itself is a freer act than the desire for self-benefit. (*Ordinatio* III suppl. dist. 26, in Wolter 1986: 178–179).

Contemporary scholars have examined at length Scotus's and William of Ockham's assertion that morality consists in obedience to divine commands. Scotus argues that God could contradict all but the first two commandments, and Ockham insists that God could negate every commandment, if He so desires. Moral action would then consist in obedience to laws that prescribe theft, murder and the like. But if God were to command that humans should hate Him, then as D. Clark argues, “the creature's response to this command entails certain formal requirements; namely conformity to the dictate of Right Reason which requires obedience to the divine wish” (Clark 1973: 34). Although Ockham argues that the principles of morality are no longer eternally fixed in

nature, he still adheres to the notion that right reason leads to proper moral choices. The dictates of right reason, however, have their source, as T. Osborne indicates, in God's free decision about the moral value of certain actions (Osborne 2005: 10). For Ockham error occurs not because of a lack of justice or rectitude required in the act itself, but rather due to an absence of rectitude in the will itself. Moral wrong is nothing other than the will's failure to elicit an act according to a divine precept. Rectitude of action becomes then the act elicited according to right reason in conformity with divine law (*Quodlibet* 3.15). Failure to follow the process of rational syllogistic reasoning produces moral wrong when the minor precept that commands a specific course of action is ignored, because the will chooses on the basis of desire and passion. Rectitude or justice is ignored in favor of what the will determines to be advantageous or beneficial in the explanations of moral error in the doctrine of Scotus and Ockham.

The Christian authors of the medieval period accepted Aristotle's basic description of moral action that functions according to syllogistic reasoning. They attempted to overcome the problem of explaining how one who has knowledge of universal principles would ever be in a position to choose an evil or sinful action. Whether they focused upon the intellectual process of deductive reasoning or the will's ability to choose freely, they were able to give a fuller account of human error and volitional responsibility. Their discussions are not without philosophical interest today, since they considered important ethical questions, such as those concerning volitional freedom, the conflict between self-interest and duty and the ultimate goal of the moral life.

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DIVINE COMMAND THEORY

Hannes Möhle

The essence of divine command theory is the claim that God's command is the ultimate source of moral obligation. Furthermore being in accordance with the divine commands is the prerequisite for something to be classified as morally good. Within such an interpretation of the theory the assumption of intrinsic goods or the rational determination of the divine commands is not called into question. Yet in a narrower sense, the requirements of a divine command theory are only met if the divine will is considered as a source of moral obligations measuring morality independent of the intrinsic value of possible actions. To emphasize it: obligations are obligations not because they are based on what is good; they are obligations because of God's command, and as God's commands they are good. In this refined interpretation, divine command ethics and theological voluntarism are equalized.

According to common belief, this doctrine was developed in the late Middle Ages. One of its main points is taken from the discussion in Plato's *Euthyphro*, on whether the good is loved by the Gods because it is good, or whether the good is good because it is loved by the Gods.¹ But the sources of this medieval doctrine and its exact context are controversial. There is neither a cohesive theory of divine command ethics in the Middle Ages nor a continuous scholarly tradition within which the development of the doctrine is pursued. Authors from the late thirteenth and early fourteenth centuries, such as John Duns Scotus and William Ockham, and authors from the second half of the fourteenth century, such as Peter of Ailly, Ailly's disciple Jean Gerson, and Andrew of Neufchateau, are regarded as the founders and representatives of the doctrine.²

At the heart of the debate over divine command theory is the issue of understanding theological voluntarism. This controversial issue does not stem from the notion that God demonstrated a free act of creation by creating a world on which the values and principles used to evaluate moral actions are founded. Theological voluntarism, insofar as it is considered to be problematic, stems from the assumption that acts of the divine will manipulate the existing world, resulting in changes in values perceived as fundamental and natural. Paradigmatically, this issue is discussed with reference to the biblical "scandals" of the late thirteenth century: namely those reports in the Hebrew Bible about divine commands which openly contradict the Decalogue. For example, the divinely commanded cases of Hosea's unchastity, the plundering of the Egyptians, and the sacrifice of Isaac seem to question the commandments of the Decalogue, especially the moral standards imprinted on nature. In these reports from the Hebrew Bible the divine will seems to defy its earlier decrees in a way inaccessible to human reasoning, thereby questioning the natural ability of human beings to differentiate between good and evil.

However, the freedom of divine action, which is visible in these reports, suggests answers to a debate about the correct interpretation of freedom, especially divine freedom, which intensified in the last third of the thirteenth century. The condemnation of 219 heretical theses—including central notions concerning freedom—in 1277 prominently accentuates the freedom of divine action.

John Duns Scotus's doctrine of the distinction between an "ordinate power" (*potentia ordinata*) and an "absolute power" (*potentia absoluta*) regarding God's freedom is to be understood in this context. According to Scotus, the world in its factual, divinely established existence is established only because of a possible, but not necessary decision of God. God could have willed another world order, with its own specific moral obligations. Laws only apply insofar as they are enacted through the acceptance of the divine will. According to Scotus's doctrine, through God's decision, God is bound to this world's structures and laws in the context of his ordinate power. In this world, the same facts and laws cannot exist and not exist at the same time in the same respect. For example a prohibition of the killing of human beings could not apply and then not be applied in the same respect. Every existing order, even if it is willed by God in a free act, has to be consistent within itself, so that its rulings can be considered an order. However at any point in time, God could replace an existing order with another one, that is contradictory to its predecessor, but it is God's absolute power, not his ordinate power that allows God to take such action.³

In the end, Scotus interprets any factual—ontological and moral—world-order as willed by God and thus contingent while still being internally consistent within itself. In order to claim consistency, formal principles must be underlying every act of the divine will. For that reason, Scotus conceives the law of nature as being bipartite:⁴ in its strictest interpretation it is not subordinate to an act of the divine will,⁵ and that prevents God from being able to dispense with the demands of natural law in its strict sense. Such natural law governs the duty to love God and consequently the prohibition to hate God.⁶ In a different context Scotus supports the idea of this natural law by stating "what is best must be loved most."⁷ Not even God's absolute power is able to invalidate this strict natural law. According to Scotus, the second side of the natural law is less strict and embraces commands which have broad agreement (*consonantia*) with the natural law in the strict sense.⁸ Among those are the commandments of the second table of the Decalogue, but possibly further commands as well, which are at least factually related to the divine creation. Although these commands might not be known by direct revelation as is the case with the commandments of the Decalogue, they nevertheless are re-traceable as a coherent set of values underlying the factual world. Scotus explains this using an analogy to positive law.⁹

Ideas already touched on by Scotus are emphasized and placed in the center of the ethical theory found in William Ockham's work.¹⁰ According to Ockham, even if the order of moral commands as decreed by God is the measure of the moral good, a morally good act, an *actus virtuosus*, can only come about if the acting subject's faculties of both will and reason take part in it.¹¹ For this reason the acts of prudence and will are the necessary causes that generate a moral act. Therefore it is necessary that these acts are incorporated within the notions of the moral and the commendable. This makes breaking apart their relation impossible, even by divine intervention. God could neither replace the act of cognition¹² nor the act of the will¹³ without impeding the *actus virtuosus*. This means each of these acts serves as a *causa partialis* that cannot be suspended by divine intervention. Ockham states:

Someone might ask about an act of prudence: How is it related to a virtuous act? What genus of cause does it belong to? Since in your view prudence is necessarily required, and it is also true that an effect sufficiently depends on its essential causes, etc., my answer is that it is an efficient cause, necessarily requisite to an act of virtue, without which it is impossible that an act should be virtuous, according to the present divine ordination. For a virtuous act necessarily

requires the activity of an act of prudence and an act of will, so that these two causes are partial causes, together with God, with respect to a virtuous act.¹⁴

In that quotation the reference to the divine order as being continuously valid, articulates a necessary, yet by no means sufficient condition of moral goodness. God's command is the necessary measure of morality. This means every morally good act depends on the factual order established by God which, as the measure of morality, is a *causa partialis* at the same time. To infer the possibility of changing the will's basic dependency on reason due to the wording "*stante ordinatione divina quae nunc est*" would be a misunderstanding. In addition the reference to reason is a necessary condition of morality and therefore only both conditions combined are sufficient. The divine order, even if altered, can only be the measure of morality if it can be recognized rationally and the will can refer to this recognition. God may change the contents of what is commanded at a given point so that even hatred of God could become a possible divine commandment,¹⁵ but that does not change the will's basic dependency on reason. Whatever the right thing is in a given situation, it is the task of reason to recognize it and thereby provide the measure on which the will acts.

Ockham interprets the biblical scandals, which can be seen as test cases for a divine command theory, in this framework.¹⁶ Adultery and theft cease to be adultery and theft in a morally significant sense as soon as they have been decreed as obligatory rules by divine intervention. Ockham by no means dispenses with objectivism in an attempt to negate that a conceived object (drawn on as a partial cause of action by reason) designates the moral dignity of an act. For example a changed legal order might result in the fact that the taking of other people's goods ceases to be morally condemnable theft, like it had been before God decreed the correspondent commandment. The reason for this lies in the assumption that an object of action is only sufficiently determined in its objectivity within the bigger framework of a legal order. What characterizes theft can only be determined objectively by reference to the legal framework which, in this case, forbids the taking of a stranger's goods. Within a different legal order equivalent actions of human beings may not necessarily be classified as theft or adultery. They are objectively something different because, as a last consequence, they aim to adhere to the given legal order.¹⁷

Conditional to the dictum "*stante ordinatione divina quae nunc est*"¹⁸ it appears questionable that the rational structure of Ockham's ethics can be maintained even when applying this sense of objectivism. This question does not only surface in Ockham's doctrine. It concerns every conception of ethics that binds the moral goodness of an action to a superordinate legal order that as a whole is changeable due to its dependency on the divine will.

The question can be divided into two. First: what is the meaning of the doctrine of God's command, and second: what are the consequences of such a doctrine concerning the rationality of ethics? Underlying the first question is the well-known differentiation of divine action, into *de potentia ordinata* and *de potentia absoluta*. When introducing this differentiation, Ockham adds two remarks in order to prevent misunderstanding. First he considers it a mistake to deduce from *ad extra* and its various effects the existence of distinct underlying faculties. In the second place he calls it a mistake to conclude from these distinct effects that God could do something *non ordinate*. This conclusion is invalid, because "God cannot do anything *inordinate*."¹⁹ It appears that Ockham assumes there is a singular and unchangeable order, for which God is responsible as *causa efficiens*. Since God is the only one that can command an order, it would not make any sense to claim he could effect something outside of and therefore against a given order.

Looking at God's action *ad extra* these actions are alterable as they appear in a timely fixed succession. According to the *ad extra* viewpoint, God's actions can emerge as a timely fixed succession of commands or as legal arrangements possibly replacing each other. In this sense, Ockham says, "what once was possible according to past laws can become impossible according to current laws, even if it is possible in an absolute sense."²⁰ God is an *agens* "that is not defined by a certain

sequence or an order of things [and therefore] can produce things according to a different order (*secundum alium ordinem*).²¹

Reflecting on the perspective of past creations, external things, or the laws dictated by God does not necessarily represent the existence of a unique order. Nonetheless they suggest a structured order and not a disorder or a lack of order. If changes occur within the existing order this order is replaced with a new one. Only in this way does it make sense that God acts *non ordinate* or *inordinate*. As a result divine action without order contradicts itself. The assumption that a contradiction might come into existence is based on the notion that every order has to be internally coherent. An example of this coherence would be that the same external action cannot be theft in two different orders if it is legal in one and illegal in the other.

The world, as it is for us, is not necessarily the way it truly is, but it is an order. While we cannot deduce or understand the world from our knowledge of its cause, we can gain knowledge of the world merely through personal experiences. This is the only means of naturally gaining such knowledge. This way is, as Ockham states with respect to the *scientia moralis*, safer than many other ways, especially that of the *scientia moralis positiva*. With respect to ethics, the contingency of the world, with its possibility of different coexisting moral orders depending on God's will, Ockham does not infer that positive ethics mimicking God's commandments is necessary. Instead Ockham advocates a two-tiered process of a *disciplina moralis non positiva* starting from general principles known *per se* or via experience. The particular certainty of this process results from further experience, especially the experience everyone has concerning their own actions rather than the actions of others. This kind of experience only demonstrates to us the available consciousness of our own freedom.²²

Since possible orders of the world can neither be conceived deductively nor, to a sufficient degree, through positive legislation, Ockham advocates for an experience-based science of the good. This kind of science alone is "*multum subtilis, utilis et evidens*."²³ This approach cannot be called voluntaristic because experience-based knowledge plays a major role in the origin of moral actions. This experience-based knowledge cannot be directly suspended even if God intervenes in the world order, nor does it lose its importance in the face of the contingency of the world or by disregarding natural teleology. Above all, experience-based knowledge has a causal relevance within the framework of Ockham's doctrine of partial causes even if it cannot force the will to act in a certain way.

At the end of Peter of Ailly's²⁴ first book of his commentary on the *Sentences*, he extensively discusses if God's will is the source for legislation that is binding for human beings. In the beginning a characteristic of his doctrine is the conviction that creation as a whole, as well as the moral order, can analogically be traced back to the divine will as their original source. As God is the initial source and cause of creation, God also represents the first rule through which creation is morally obligated.²⁵ As God wants something to exist he also wants it to behave in a certain way. Thus, his will is the "*lex obligatoria*." This does not mean that there are no other laws; however, these laws in their perfection represent a copy of the divine will's original perfection. In this sense, any law is always referring to God as the original legislator, insofar as any given law is derived from the divine will.²⁶

As a consequence of Peter of Ailly's doctrine, an uncertainty arises as to whether or not there are any limits for the divine will and this calls into question man's moral orientation by means of natural reason. Peter of Ailly recognizes and debates the problem by referring to the question: can God obligate rational beings to do something impossible? The answer he offers is that it cannot be the case if it involves any form of contradiction. Yet it appears to be possible in the sense that a divine command may exceed the faculties of human beings. Thereby, the objectivity of what is obligatory is not dispensed with; instead an unsound subjectivism is prevented. This becomes clear in the ensuing debate in which Peter of Ailly examines problems concerning the obligations

of conscience. His solution envisages the impossibility of an erratic conscience having binding force, because every obligation can be traced back to the divine will and therefore is founded in the highest truth. This excludes the possibility of an obligation not being founded on the highest truth.²⁷ As Peter emphasizes, there is no obligation to perform acts by which one distances oneself from a given, even if erratic, judgment of one's conscience. The reason for this stance is that no rational being can be obligated to act against its present conscience, be it erratic or not, since anyone acting against his conscience is considered a sinner.²⁸ Therefore the divine will is a necessary, however not sufficient condition for the obligatory character of moral rules. An erratic conscience can get in the way of the effectuality of an obligation. Peter recognizes that there is an obligation to the truth, especially in the sense that anyone subject to an erratic conscience may realize the error of their own false judgments, even if one may not be able to fully understand the detailed characteristics of this error. Consequently, one can overcome the erratic judgment and is thereby obligated to do what one is actually commanded to do without committing a sin by acting against one's conscience.²⁹

Peter of Ailly connects two threads in this discussion: on the one hand, he connects a command's claim over binding truth (decreed by the divine will) which is not suspended by deviating judgments of the subjective conscience, and on the other hand, the indispensable claim of the subjective conscience which is not suspended in its moral meaning by external acts opposed to it. Explicitly, both of the above-mentioned threads are components of a theory of action for rational beings. Neither the subjective component of the conscience nor the objectivity of the highest truth—Peter expressly identifies it with the divine will³⁰—are on their own sufficient to explain the obligatory character of moral norms in the framework of a theory of action for rational beings. Inner and outer court seem to be in concordance with one another, as Peter states: "Everything that is just before the inner court is just before the outer court and vice versa."³¹

Andrew of Neufchateau pursues the same line of argumentation as Peter of Ailly. He emphasizes the foundation of moral goodness from within the divine will and refers, like Peter, to the analogous causation of the moral order and of creation as a whole in the divine *causa efficiens*. There is no problematic voluntarism resulting from this assumption, since Andrew conceives causation as taking place equally by means of the divine will as well as the divine intellect. The consequence of this foundation of moral goodness in will and intellect is the *recta ratio* as a measure of the adequacy of the moral order and is mirrored within natural law.³²

It is important that Andrew's thesis on God as the founder of the moral order does not represent a form of voluntarism by dispensing with reason. The fact that God is the *prima regula* of the moral order allows Andrew to expressly conclude that the rules natural reason imposes on what to do and what to avoid are adequate:

And therefore it is so in fact as natural reason prescribes about what ought to be chosen and what ought to be avoided because God prescribes that it be so in fact since he is the first rule of all other rectitude. And God is the effective and the final and as it were the formal and the exemplary and the regulative and the measuring cause of this goodness.³³

The same context seems to be interwoven throughout a discussion in which Andrew asks about the reasons behind what makes human actions good and just. He stresses that the divine will does not want—and respectively does not command—these actions as good and just, because each of them is a *bonum ex natura rei*, or because the conscience makes those decisions based on a judgment already issued from divine reason. The will as a will and not a command of divine reason is the crucial norm for the good and just.³⁴ A possible objection to this assumption, according to Andrew, is the argument that God does not do anything without a prior judgement of reason—*Deus nihil agat nisi ex ratione praedictante et praeiudicante*.³⁵ Andrew's answer to this objection is very

brief and has posed many problems for commentators:³⁶ “It suffices that volition and activity be conformed to a right rational dictate formally present in the beginning of the action.”³⁷ Andrew obviously rules out the notion that a preceding cognition is the reason for God’s volition. At the same time he adheres to the assumption that there has to be a concordance between a volition and the cognition of what is right at the beginning of an action. God’s action, the reason for moral goodness, is not subject to a preliminary process of consideration in which the divine intellect suggests a decision to the will which in turn is in a state of ignorance and uncertainty before that suggestion. Yet Andrew does not hesitate to regard the divine will as being in a rationally determined conformity with an original judgment of the *recta ratio*.³⁸ By founding moral values in the divine will, Andrew clearly emphasizes the irreducible act of a free will. Yet that does not lead him to suspending the unquestionable conformity of volitions with reasonable judgments of the *recta ratio*. Even if the will is the original *movens* of divine action, the rationality of the moral rules willed by God is never doubted.

Jean Gerson adopts a central thesis of a divine command theory, according to which moral values cannot be determined intrinsically, but are based on the commands of the divine will. Nevertheless he sees this thesis as something that needs further explanation. Above all, he considers the allusion to God as being just in every regard, and therefore [*quoniam justus est in omnibus viis suis*] it is the most appropriate response to any kind of objection to such a thesis.³⁹ What is specifically meant with this theory becomes clear from Gerson’s definition of the term “law,” given shortly after the passage in question. According to this definition, law is derived from concordance with the *dictamen rectae rationis*. This *dictamen* of correct reasoning, in turn, has its origin in God.⁴⁰ If one asks whether this origin is founded in the divine will or in another faculty, the answer is that moral rules can in no way precede the will. Gerson regards it as more adequate for the catholic faith and as more convincing in order to not assume that there is any priority in the relation between will and intellect. Instead, he insists that there is a correlative and concomitant relation between these two components. In this sense God’s will and intellect are the origin of the divine command that one faculty cannot precede the other. Instead, they both work together and generate the moral commands in mutual dependency [*correlativa sunt et concomitantur quodammodo sese inferential*].⁴¹

It seems that two conceptions come together in late medieval approaches to divine command theory, which only become relevant in their mutual reference to one another. On the one hand, resulting from the notion of divine creation, there is the understanding that the world is contingent and thus dependent on God’s free will, with its moral dimension being constituted by divine commands. On the other hand, resulting from the assumption of a God that is good to his creation, there is the claim that God’s commands have to be conceivable by human beings as created beings. Only in the light of this premise do Scotus’s bipartite doctrine of natural law, Ockham’s theory that the necessity of an act of cognition precedes moral action, and Peter of Ailly’s doctrine of conscience become understandable. Likewise, Andrew of Neufchateau’s demand for conformity as well as Jean Gerson’s characteristic thesis of the mutual dependency of the divine will and intellect can only be explained in the light of these concurrent conceptions.

The unity of goodness and cognizability is the result of the unity of will and intellect in God. During the Middle Ages these two motives are drawn on differently under different interpretations. However they remain intact as the core of different ethical theories. The relevance of reason does not at all seem to have become obsolete for medieval authors because of the emphasis on volition. Considering the divine will as the origin of moral obligation did not lead to irrationalism. It rather can be understood as an expression of the impossibility of giving ultimate rational justification for practical reason.

The accentuation of the obligatory character of morality as it is prevalent in divine command theory highlights the intrinsic value of moral action. The assumption that something is good because it is morally dictated and not because it is teleologically connected with something else

is put into the limelight. To do what is good for the sake of what is good converges with acting, based on commands of the divine will. This engages human beings without regard to an already present good which on its own part, would have to be justified again.

Notes

- 1 Plato, *Euthyphron*, 10a.
- 2 A historical and systematic survey with an extensive bibliography is provided by Idziak (1979, esp. 1–49).
- 3 “Unde dico quod multa alia potest agere ordinate; et multa alia posse fieri ordinate, ab illis quae fiunt conformiter illis legibus, non includit contradictionem quando rectitudo huiusmodi legis—secundum quam dicitur quis recte et ordinate agere—est in potestate ipsius agentis. Ideo sicut potest aliter agere, ita potest aliam legem rectam statuere,—quae si statueretur a Deo, recta esset, quia nulla lex est recta nisi quatenus a voluntate divina acceptante est statuta; et tunc potentia eius absoluta ad aliquid, non se extendit ad aliud quam ad illud quod ordinate fieret, si fieret: non quidem fieret ordinate secundum istum ordinem, sed fieret ordinate secundum alium ordinem, quem ordinem ita posset voluntas divina statuere sicut potest agere.” Scotus, *Ord.* I d. 44 n. 8 (Vat. 6: 366); cf. Wolter (1997: 257).
- 4 For Scotus’s doctrine of natural law see Möhle (2003); for its wider context see Möhle (1995).
- 5 “[Praecepta necessaria] praecedunt in veritate omnem actum voluntatis, vel saltem habent veritatem suam, circumscripto per possibile vel possibile omni velle.” Scotus, *Ord.* III d. 37 n. 14 (Vat. 10: 277); Wolter (1997: 275).
- 6 Cf. Scotus, *Ord.* III d. 37 n. 23 (Vat. 10: 28); Wolter (1997: 279).
- 7 “Optimum esse summe diligendum.” Scotus, *Ord.* III d. 27 n. 14 (Vat. 10: 52); Wolter (1997: 425).
- 8 “Alio modo dicuntur aliqua esse de lege naturae, quia multum consona illi legi, licet non necessario consequantur ex primis principiis practicis.” Scotus, *Ord.* III d. 37 n. 25 (Vat. 10: 283); Wolter (1997: 279).
- 9 Scotus, *Ord.* III d. 37 nn. 27–28 (Vat. 10: 283–284); Wolter (1997: 281).
- 10 Adams (1999) and Wood (1997).
- 11 Ockham, *Quaest. var.* VII a. 3 (OT 8: 362).
- 12 “Ad primum istorum, [scilicet quod Deus potest suspendere activitatem prudentiae et supplere causalitatem voluntatis], tenendo illud principium quod effectus sufficienter dependet ex suis causis essentialibus etc. ex quo sequitur quod nullum absolutum necessario requiritur ad aliquem effectum nisi aliquo modo sit causa illius effectus, et per consequens cum prudentia actualis necessario requiratur ad actum virtuosum et est aliquo modo prior, sequitur quod actus prudentiae sit vere causa efficiens essentialiter et necessario requisita ad actum virtuosum, ita essentialiter sicut voluntas necessario requiritur tamquam causa efficiens ad hoc quod actus sit virtuosus vel meritorius. Et per consequens sequitur ultra quod suspensa activitate voluntatis vel actus prudentiae, nullo modo dicitur talis actus virtuosus. Et ratio est quia virtuosum et meritorium sunt nomina connotativa et significant ipsum actum non absolute, sed connotando cum hoc activitatem voluntatis et prudentiae, et quando deficit aliquid connotatum non dicitur talis actus virtuosus.” Ockham, *Quaest. var.* VIII (OT 8: 417–418).
- 13 “[D]ico quod ex hoc quod praecise est conformis rationi rectae non est virtuosus, quia si Deus faceret in voluntate mea actum conformem rationi rectae, voluntate nihil agente, non esset ille actus meritorius nec virtuosus. Et ideo requiritur ad bonitatem actus quod sit in potestate voluntatis habentis illum actum. Similiter, non plus est actus virtuosus propter rectam rationem quam propter finem vel aliam circumstantiam, quia sicut recta ratio est obiectum partiale actus virtuosus vel vitiosus, ita finis et tempus aliquando. Et tamen nullus ponit quod prima bonitas actus est a fine vel a tempore, sed solum actus voluntatis qui primo est imputabilis est primo bonus vel malus moraliter. Et post, voluntas denominatur bona vel mala mediante actu, et aliquando actus etiam denominatur denominatione extrinseca.” Ockham, *Quaest. in Sent.* III q. XI a. IV (OT 6: 389–390).
- 14 Wood (1997: 123).

Si quaeras de actu prudentiae, in quo genere causae se habet ad actum virtuosum, ex quo necessario requiritur per te, et effectus sufficienter dependet ex causis suis essentialibus etc.: respondeo quod est causa efficiens necessaria ad actum virtuosum, sine qua impossibile est actum esse virtuosum, stante ordinatione divina quae nunc est, quia ad actum virtuosum necessario requiritur activitas actus prudentiae et activitas voluntatis, ita quod illae duae causae sunt causae partiales cum Deo respectu actus virtuosus.
Ockham, *Quaest. var.* VII a. 3 (OT 8: 363); cf. *Quaest. in Sent.* IV q. III–IV (OT 7: 49)
- 15 Ockham, *Quaest. in Sent.* IV q. XVI (OT 7: 352).

- 16 Mandrella (2002: 151–170).
- 17 “Sed stante praecepto divino ad eorum [scilicet: odium, furari, adulterari] opposita non potest aliquis tales actus meritorie nec bene exercere, quia non possent (exerceri) meritorie nisi caderent sub praecepto divino. Sed opposita non possunt simul cadere sub praecepto divino. Sed si sic fierent a viatore meritorie, tunc non dicerentur nec nominarentur furtum, adulterium odium etc., quia ista nomina significant tales actus non absolute sed connotando vel dando intelligere quod faciens tales actus per praeceptum divinum obligatur ad oppositum.” Ockham, *Quaest. in Sent.* II q. XV (OT 5: 352).
- 18 Ockham, *Quaest. var.* VII a. 3 (OT 8: 363); cf. *Quaest. in Sent.* II q. XV (OT 5: 353); *Quodl.* III q. 14 (OT 9: 255).
- 19 “Circa primum dico quod quaedam potest Deus facere de potentia ordinata et aliqua de potentia absoluta. Haec distinctio non est sic intelligenda quod Deo sint realiter duae potentiae quarum una sit ordinata et alia absoluta, quia unica potentia est in Deo ad extra, quae omni modo est ipse Deus. Nec sic est intelligenda quod aliqua potest Deus ordinate facere, et aliqua potest absolute et non ordinate, quia Deus nihil potest facere inordinate.” Ockham, *Quodl.* VI q. 1 (OT 9: 585–586).
- 20 “Sed tamen illud quod tunc erat possibile secundum leges tunc institutas, nunc non est possibile secundum legem iam institutam, licet absolute sit possibile.” Ockham, *Quodl.* VI q. 1 (OT 9: 586).
- 21 “Praeterea agens quod non determinatur ad certum cursum et ordinem rerum, secundum alium ordinem res illas producere potest; sed Deus est tale agens.” Ockham, *Quodl.* VI q. 1 (OT 9: 587).
- 22 “Circa primum [utrum voluntas libere causat actus suos] dico quod non potest probari per aliquam rationem, quia omnis ratio hoc probans accipiet aeque ignotum cum conclusione vel ignotius. Potest tamen evidenter cognosci per experientiam, per hoc quod homo experitur quod quantumcumque ratio dictet aliquid, potest tamen voluntas hoc velle vel non velle vel nolle.” Ockham, *Quodl.* I q. 16 (OT 9: 88).
- 23 “Et ultra dico quod ista scientia [sc. scientia moralis non positiva] est certior multis aliis, pro quanto quilibet potest habere maiorem experientiam de actibus suis quam de aliis. Ex quo patet quod ista scientia est multum subtilis, utilis, et evidens.” Ockham, *Quodl.* II q. 14 (OT 9: 178).
- 24 Kennedy (1963) and Brinzei (2013).
- 25 “[S]icut divina voluntas est efficiens causa, quia vult aliquid esse vel fieri, sic ipsa est lex obligatoria, quia vult aliquid ad aliquid esse vel non esse teneri.” Peter of Ailly, *Quaest. Sent.* Principium I, 18 (Brinzei 2013: 423–425); cf. I q. 14. a. 3 (Paris: f. 210 va).
- 26 “[Q]uod omnis lex creata dirivatur a voluntate divina.” Peter of Ailly, *Quaest. Sent.* I q. 14. a. 3 (Paris: f. 210 vb); cf. Principium I, 15 (Brinzei 2013: 355–361).
- 27 “[N]ulla conscientia erronea est lex obligatoria . . . , quia omnis lex seu regula est conformis divinae voluntati tamquam lex secundaria prime legis, sed nulla conscientia erronea est conformis primae legi cum nulla falsitas sit conformis summae veritati.” Peter of Ailly, *Quaest. Sent.* I q. 14. a. 3 (Paris: f. 211 va); cf. Principium I, 16 (Brinzei 2013: 367ff, 394).
- 28 “[C]reatura rationalis obligatur numquam suae conscientiae erroneae se difformare. Patet quia tenetur numquam agere contra suam conscientiam. Nam quicumque agit contra conscientiam peccat.” Peter of Ailly, *Quaest. Sent.* I q. 14. a. 3 (Paris: f. 211 va); cf. Principium I, 16, (Brinzei: 375–383).
- 29 “[Q]uia licet sit impossibile ipsam scire vel opinari in particulari suam conscientiam esse erroneam, quia sic haberet iudicia contraria, tamen istam conscientiam quam nunc habet potest cognoscere fuisse erroneam et deponere eam. Et sic poterit agere illud ad quod tenetur et non peccare.” Peter of Ailly, *Quaest. Sent.* I q. 14. a. 3 (Paris: f. 211 va–b).
- 30 “[N]ulla falsitas est divinae voluntati consona, cum voluntas divina sit veritas summa.” Peter of Ailly, *Quaest. Sent.* Principium I, 16 (Brinzei 2013: 368–369).
- 31 “Ex quo sequitur quod quicquid est iustum in foro interiori, est iustum in foro exteriori et similiter e contra.” Peter of Ailly, *Quaest. Sent.* Principium I, 17 (Brinzei 2013: 399–400).
- 32 “De bono etiam morali probatur idem, quia ideo est sic bonum quia conforme prudentiae et rationi rectae morali secundum ius naturale; sed talis ratio ideo est recta quia divinus intellectus et voluntas sic dictat et ordinat et approbat.” Andrew of Neufchateau, *Primum Scriptum Sententiarum* d. 48, q. 1. a. 1 (Idziak 1997: 10).
- 33 “Et ideo ita est in re sicut ratio naturalis dictat de eligibile et fugibili quia Deus dictat ita esse in re cum sit prima regula omnis alterius rectitudinis; et huius bonitatis Deus est causa effectiva et finalis et quasi formalis et exemplaris et regulativa et mensurativa.” Andrew of Neufchateau, *Primum Scriptum Sententiarum* d. 48, q. 1. a. 1 (Idziak 1997: 10–11).
- 34 Andrew of Neufchateau, *Primum Scriptum Sententiarum* d. 48, q. 1. a. 2 (Idziak 1997: 34).
- 35 Andrew of Neufchateau, *Primum Scriptum Sententiarum* d. 48, q. 1. a. 2 (Idziak 1997: 38).
- 36 Idziak (1997: 126–127).

- 37 “Sufficit quod velle et agere sit conforme recto dictamini rationabili formaliter inexistenti in principio actionis.” Andrew of Neufchateau, *Primum Scriptum Sententiarum* d. 48, q. 1. a. 2 (Idziak 1997: 44–45).
- 38 “[A]ccipitur consilium non proprie et stricte pro discursu deliberativo super agendum implicante antecedenter aliquam ignorantiam vel ambiguitatem et obscuritatem, sed pro dictamine intellectuali respectu agibilium. Et dicitur Deus velle ex ratione quia rationabiliter et conformiter rectae rationi formaliter inexistenti.” Andrew of Neufchateau, *Primum Scriptum Sententiarum* d. 48, q. 1. a. 2 (Idziak 1997: 44).
- 39 Jean Gerson, *De vita spirituali animae*, lec. 1, corol. 10 (*Oeuvres Complètes* 3: 124).
- 40 “[J]us est facultas seu potestas propinqua conveniens alicui secundum dictamen rectae rationis. Itaque totalis et finalis resolutio materiae nostrae ad dictamen rectae rationis terminatur. Recta ratio et dictamen suum est primo originaliter et essentialiter in Deo.” Jean Gerson, *De vita spirituali animae*, lec. 3 (*Oeuvres Complètes* 3: 141).
- 41 “Constat quod in praxibus moralibus recta ratio non est prior voluntate ut non ideo Deus vult dare leges suas creaturae rationali quia prius recta ratio sua iudicet hoc esse faciendum, sed e contra potius. Videtur igitur positio esse magis catholica et expedita si dicamus neutrum esse prius altero in Deo, sicut in simili non ideo quia sic est in re extra quod Sortes ambulabit Deus sic iudicat; nec proprie e contra, sed correlativa sunt et concomitantur quodammodo sese inferentia, ita in proposito et multis similibus.” Jean Gerson, *De vita spirituali animae*, lec. 3 (*Oeuvres Complètes* 3: 141).

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31

CONSCIENCE

Douglas C. Langston

Early scholastic discussions of conscience in the twelfth and thirteenth centuries are concerned with distinguishing conscience from synderesis. Since each medieval scholar had to comment on Peter Lombard's *Sentences* to become a Master of Theology, what Lombard (d. 1160) put in his *Sentences* wielded tremendous influence on what was discussed in the universities by masters and students. In his work, Lombard cites a passage from St. Jerome (d. 416) in which Jerome interprets the prophet Ezekiel's vision of four living creatures, shaped like men but each having four faces, coming out of a cloud (Ezekiel 1: 4–10). The four faces were those of a human being, a lion, an ox, and an eagle. Jerome identifies the human face with the rational part of human beings, the lion as the emotional part, the ox as the appetitive part, and the eagle as that

which the Greeks call synteresis: that spark of conscience which was not even extinguished in the breast of Cain after he was turned out of paradise, and by which we discern that we sin, when we are overcome by pleasures or frenzy and meanwhile are misled by an imitation of reason.

(Potts 1980b: 689)

Jerome thinks that, while synteresis (alternatively, synderesis) is never extinguished in human beings, wicked people cease to have conscience. Since Jerome seems to distinguish synderesis from conscience, Lombard follows his lead and distinguishes the two. Later commentators on Lombard's *Sentences* were thus obligated to address their difference and discussions about conscience involved distinguishing them.

Philip the Chancellor (d. 1236) wrote a treatise on conscience that offers a number of ways of distinguishing between conscience and synderesis. In one section of his treatise, he regards synderesis as an unerring intellectual disposition that relates to general moral truths that human beings through free choice accept or reject. Conscience, on the other hand, performs the specific applications of the general moral truths discerned through synderesis. This view places both synderesis and conscience in the intellect. Through synderesis, human beings grasp general moral truths and then they use conscience to reason about how to apply these general truths in specific circumstances (Potts 1980a: 104). In another section, however, Philip regards synderesis more as a general desire for the general good present in things (Potts 1980a: 101–102). It is also linked with displeasure over evil and with guilt (Potts 1980a: 107, 108). These views seem to regard synderesis as part of the affective/emotional part of human beings. While it may be that Philip has two different conceptions of synderesis, it may also be the case that he believes that it has both intellectual

and emotional aspects. Conscience seems to involve ascertaining how the general drive or moral principles are to be applied to specific circumstances.

At first glance, Bonaventure's (1221–1274) view of the difference between *synderesis* and conscience is straightforward: conscience is part of practical reason and within the intellect, while *synderesis* is part of the affective/emotional order because it is that which stimulates human beings toward the good. But there is a great amount of complexity within this basic view. In the first place, Bonaventure thinks there are two parts to conscience. The first part is a power for discovering the truth of very general moral commands like “obey God,” “honor your parents,” and “do not harm your neighbors.” He regards this function of conscience as very similar to the intellect's capacity to discover first principles of theoretical reason. Bonaventure regards this part of conscience as unerring and innate. Not only does this part of conscience never make a mistake about the truth of very general moral principles, but also it can never be lost to any person no matter how morally corrupt that person may become. Although Bonaventure has no name for this part of conscience, for ease of reference, let us call it “the potential conscience.”

The second part of conscience (let us label it “the applied conscience”) involves the application of very general moral principles to general cases or particular situations. General cases cover a variety of situations. An example is the Jewish prohibition against eating pork. Bonaventure sees this prohibition as a situation of applying a very general moral principle (“obey God”) to a general prohibition against eating pork that covers a number of specific situations a Jew may be found in. When a Jew applies the general prohibition against eating pork to a specific situation (considering what to eat from a menu in a restaurant, for example), the Jew is also applying the very general principle (“obey God”) to the specific situation.

According to Bonaventure, the applied conscience—like the potential conscience—is innate. It can, however, be mistaken—unlike the potential conscience. Through ignorance or faulty reasoning the applied conscience can misapply a very general moral principle. Bonaventure thinks this is the case with the Jewish command to circumcise males and refrain from various foods. Although God commanded these actions in earlier eras, God does not now command them. One might also be mistaken how to apply a very general moral principle like “obey God” in a particular situation. For example, although a person might know that God is to be obeyed, he or she might not obey Christ and, in fact, harm Christ because he or she does not know that Christ is God.

Although Bonaventure does not dwell on the relationship between the potential conscience and the applied conscience, their difference suggests a very dynamic view of conscience. Through the potential conscience human beings become aware of very general moral truths like “obey God” that they are supposed to live according to. But it is clear that we direct our lives in accord with many other general principles like “exercising will increase your lifespan” or “kindness to others is a more effective strategy in life than antagonism to others.” Where do these principles come from? Although many principles we live by come from authorities like revelation, secular and sacred authorities, and the natural law, many of these principles come from our own experience. We know from observing the lives of others that those in poor physical shape generally do not live long or well, and we know from our own lives that we feel better mentally and emotionally if we exercise consistently. Our own experience is the source for many of the general and specific principles we live by. Moreover, our ability to apply the most general moral principles we derive from the potential conscience is improved by the experiences we have. We know that we must “obey God” but we learn from experience that putting into practice rituals by which we show our obedience to God, e.g., singing God's praises, are more appropriate in some situations, e.g., church services, than others, e.g., in the middle of a faculty meeting. Bonaventure's distinctions between the potential and applied consciences as well as his distinction between very general and less general principles applied by conscience suggest a very dynamic view of conscience. We

perceive some general moral principles through the potential conscience but we formulate many moral principles through the applied conscience based upon our own experience. In fact, we may even change or reject principles we have held based upon newer experiences. For Bonaventure, conscience is not a dead, mechanical power that merely applies general principles to specific cases; it is something dynamic and constantly adjusting.

The fact that conscience is so complex for Bonaventure allows him to address why we make mistakes through our conscience as well as the power conscience has over us. Since many of the principles of conscience are based upon experience, we can improve our application of conscience to specific circumstances by constantly assessing the results of our actions. The more we adjust to our surroundings, the more likely our applications of conscience will be effective. Mistakes of conscience are made when we get principles wrong or fail to apply principles in effective ways. While these mistakes are often cases of wrong application, e.g., we confuse an actor's pretending to be a villain with a condemnation of the actor himself, often they are a failure to adjust to circumstances, e.g., singing hymns at a faculty meeting. So failure to practice conscience in an observant way leads to trouble. And trouble may also come when what we claim to know from conscience is in conflict with authority.

According to Bonaventure, conscience may require one of three types of actions: those in conformity with God's law; those in addition to God's law; and those contrary to God's law. There is no difficulty with either of the first two types of actions; we should follow the dictates of conscience. The third case is more difficult. On the one hand, it is clear that we should follow God's law. This follows readily from the very general principle, "obey God," which we learn through the potential conscience. But it is wrong, according to Bonaventure, to act against our conscience, in part since conscience is the representative within us of God. So we are caught in a dilemma. On the one hand, our conscience mistakenly requires us to act against God's law and so we should not follow our conscience; on the other hand, God's law seems to require that we follow our conscience and so we need to follow our conscience and act against God's law.

In looking at this situation, Bonaventure acknowledges that there are at least two different situations. In one situation, we are ignorant that what we think we need to do through conscience is in violation of God's law. In the second situation, we are well aware that conscience is dictating an action in violation of God's law (probably promulgated by a religious authority). In looking at the first case, Bonaventure distinguishes between what we do from the manner in which we do it. In situations where we go against our own conscience, we know that we are acting in an evil manner (even if going against our conscience turns out to be what is required by God's law) because we know we are intentionally acting against God's representative in us, i.e., our conscience. So the manner in which we act when we violate our conscience is known to be wrong and we should not disobey our conscience. In the second case, however, when we know that our conscience violates a law of God (as proclaimed by an authority), we must follow the law rather than our own conscience. What Bonaventure, presumably, has in mind here are situations in which our conscience arrives at a conclusion that is in conflict with an established religious authority like the Catholic church. For example, suppose that the Catholic church has condemned capital punishment and yet we are to impose the death sentence on a convicted murderer. In such cases, according to Bonaventure, it is better not to act at all so that one neither violates one's own conscience nor knowingly violates a law of God. Yet, there are circumstances when we must act as in the case of a Catholic judge presiding over a capital case. One then is obligated to educate oneself so that one's applied conscience is in conformity with God's law (as articulated by a legitimate authority) to bring one's conscience into conformity with what is known to be God's law. So, for Bonaventure, cases of erroneous conscience where the agent knows his conscience is in opposition to God's law require the agent not to act in accordance with conscience. The fact that Bonaventure thinks that

conscience can be educated to follow what the law of God requires once again emphasizes the dynamic quality of conscience for Bonaventure.

Bonaventure's remarks about synderesis are even more intriguing than his complex remarks on conscience. He claims that conscience is dependent on synderesis. In fact, following St. Jerome, he calls synderesis "the spark of conscience" and means by this that conscience in itself cannot perform its actions without the stimulus of synderesis. This is not to say that synderesis is in the intellectual order. On the contrary, Bonaventure places it in the affective/emotional order. Synderesis is the general drive in human beings to pursue the good and do good. As a result, it stimulates conscience to search for very general moral principles (the activity of the potential conscience), to develop general moral principles (an activity of the applied conscience), to apply moral principles to specific circumstances (another activity of the applied conscience), and to become vexed when the principles are not followed. Thus synderesis works closely with conscience; it provides the drive to the good that conscience applies to specific situations. Conscience thus requires synderesis. But synderesis also requires conscience. Since synderesis is the drive to the good and all created things are good, synderesis does not supply specific directions about which objects should be pursued and which are to be avoided. Conscience provides this direction, however.

Bonaventure thus presents a nuanced view of both conscience and synderesis. They are closely interconnected and require one another for their proper functioning. Moreover, each one is very complicated. Conscience provides principles for action and applies those principles to specific circumstances. Synderesis moves human agents to the good through conscience and is directed by the principles of conscience to pursue the good, whether real or apparent. While some may think that the strong interconnections between conscience and synderesis show that Bonaventure is confused about their natures, it is more likely that Bonaventure was more interested in how the two function in the whole person.

In contrast to Bonaventure's placement of synderesis in the affective/emotional order, Aquinas (1225–1274) places it in the rational part of the human agent. He says that synderesis is the natural disposition of the human mind by which we apprehend without inquiry the basic principles of moral behavior. Once these principles have been apprehended and become part of synderesis, conscience, which is also in the rational part of the agent, applies the first principles of synderesis to specific situations. Synderesis is never mistaken. It correctly derives and grasps the basic moral principles one should follow. Conscience, however, can be mistaken. It can misapply the infallible principles of synderesis by invoking an added false principle or by an incorrect application of a principle to a specific circumstance. But even where it is mistaken, it remains binding; one must always follow conscience. In situations where there is a factual mistake and the agent is not aware that a specific situation falls under a general rule, the agent is not culpable for the mistake. Where the agent should know that the situation does fall under a general rule, the agent is culpable for the mistake. Aquinas thus seems at odds with Bonaventure on this point. While Bonaventure suggests that there are circumstances in which one should not follow one's conscience but work to re-educate conscience, Aquinas holds that conscience should always be followed. It is just that one does wrong when following a mistaken conscience and one should be held morally responsible for this mistaken conscience when one is culpable for the mistaken conscience.

At first glance, Aquinas's views about conscience and synderesis seem much simpler than Bonaventure's views. Aquinas puts both into the rational part of the human agent and he seems to describe conscience as more like a mechanism for application of principles to specific circumstances. The dynamism of conscience and the profound interconnections between conscience and synderesis found in Bonaventure's views seem to be lost in Aquinas's views. Yet, this picture of Aquinas's views is too narrow. In many ways, Aquinas retains the complexities found in Bonaventure's views of conscience and synderesis but he places these views into his discussion of the virtues. While Aquinas consistently maintains that synderesis is what allows us to grasp

general moral principles in an infallible way, his emphasis in discussing conscience is to connect it with the moral virtues.

Aquinas discusses the virtues in a number of places, especially in his *Commentary on the Nicomachean Ethics* and the *Summa Theologiae*. The first part of the second part of the *Summa Theologiae* is a systematic treatment of ethics. In questions forty-nine to sixty-seven, Aquinas presents a teleological and eudaemonistic ethics that is, in the main, Aristotelian. In his discussions, the virtue of prudence emerges as the principal virtue because it perfects the activity of reason and directs the other virtues. In Question 58, article 5 (“Can There Be Intellectual Virtue Without Moral Virtue”) Aquinas elaborates on prudence. In the first place, since prudence is right reasoning about what is to be done, prudence is involved in all the moral virtues. Moreover, since human action involves both universal principles of action and more particular principles as well, prudence must be involved with formulating particular moral principles. It does this through experience. Finally, prudence involves both correct reasoning about what is to be done as well as the correct perception of circumstances so as to apply the relevant principles.

As we have seen, Aquinas thinks that synderesis allows human beings to apprehend the universal and infallible principles of moral behavior. These very general principles are, however, somewhat empty, consisting of such general statements as “do good and avoid evil” and “obey God.” Human beings need more detail, however, in order to direct their actions correctly. These less general principles are not innate like the very general principles attained through synderesis. Rather, they are derived from experience and instruction through the virtue of prudence. In this function, prudence looks very much like Aristotle’s practical reason. For Aristotle, the development of practical reason was the key to achieving any virtue. By practical reason, we come to understand and evaluate our actions so as to move toward happiness (eudaemonia). Since no two persons are exactly alike and we all begin the path to happiness with differing abilities and tendencies, we must learn about our strengths and weaknesses and judge what actions for us lead to cultivation of the virtues. By experience, for example, the shy person learns that he must push himself into social situations to develop proper social skills that are key to overall happiness. The shy person’s path here will be very different from the path of one who is naturally outgoing. But both wish to do those actions that will aid them in achieving happiness. Through practical reason and by trial and error we can learn effective strategies of behavior. Without the consciousness of our actions and their effects, we cannot hope to reach happiness. In a similar vein, Aquinas holds that prudence allows us to develop the principles of behavior that move us toward happiness in this world and the next.

Aquinas focuses on two important aspects of prudence in his *Commentary on the Nicomachean Ethics*: eubulia and synesis. Eubulia is good deliberation toward good ends. When one correctly applies principles of moralities to situations, this is a case of eubulia. Clearly, eubulia is required for attaining happiness since only if we reason correctly will we arrive at happiness. Synesis is good judgment about the things treated by prudence. What Aquinas seems to have in mind is that synesis is involved in seeing situations appropriately. That is to say, it is the skill in perceiving situations correctly so as to apply the right principles in a particular circumstance. Aquinas thinks that both eubulia and synesis can be developed and improved. In fact, the failure to develop them, and especially synesis, is part of the explanation for why human beings do other than they think they should (usually called “weakness of will”). According to Aquinas, faced with a particular situation, there are a number of principles of action we can embrace. For example, when we see a box of chocolates, we can use the principle that pleasurable treats should be enjoyed and eat several of the pieces. On the other hand, if we have given up candy for Lent or are diabetic, we also have the principle that sweet things should be avoided. How we see the situation—whether as a situation of being presented with pleasurable treats or as a situation of being presented with sweet things—will determine which principle we invoke. Obviously, if we have given up candy or are

diabetic, we should see the situation as one of being presented with sweets and refrain from eating them. But we might be overcome with desire for the chocolates. This desire will cause us to see the situation as one of pleasurable treats to be enjoyed—to our detriment. Our will to do what we should do is weak as a result of not seeing the situation in the proper way (a failure of synesis).

Since eubulia and synesis are aspects of prudence, the weakness of will here is the result of a failure to develop the virtue of prudence. Because we have not developed our ability to see situations correctly, we do not do what we should do. Importantly, Aquinas sees this failure as a form of culpable ignorance. Because we have failed to do as we are supposed to do as dictated by prudence, we have failed to develop the virtue of prudence and our capacity to size up situations correctly. While we have not consciously acted against prudence, we have failed to develop it and are responsible for not developing it.

Aquinas has effectively linked synderesis and conscience with issues concerning the virtues. The dynamism of conscience found in Bonaventure's views about synderesis and conscience has emerged in the link with the virtues. As Bonaventure saw, principles of action must have content and be applied correctly to situations. Similarly, Aquinas held that human beings require more than very general moral principles comprehended through synderesis. They require fairly concrete directions on how to behave. He thinks that these are derived through the virtue of prudence. And it is through prudence that a human being is able to apply correctly these directions to specific circumstances. So Aquinas has connected discussion of conscience and synderesis to issues about the virtues. The turn to the virtues in discussing conscience that Aquinas makes influences subsequent discussions of conscience.

Duns Scotus's (1265–1308) comments on synderesis and conscience are surprising in a number of ways. In the first place, there is little that he says about them. His main discussion of conscience is a response to Henry of Ghent's (1217–1293) more extensive comments on conscience without an extended treatment of his own views. In the second place, as a Franciscan who disagrees with Thomas Aquinas on many important issues, it is surprising that he abandons the understanding of his fellow Franciscan Bonaventure on synderesis. In agreement with Aquinas, Scotus places synderesis in the intellectual order where conscience is also to be found. This seems particularly surprising because Scotus is a voluntarist who argues that the will in both God and human beings is superior to the intellect. One would expect that the “spark of conscience” (the view Bonaventure had about synderesis) would be in the will since it is the more important faculty for Scotus. Once again, however, the picture is more complicated than it seems at first glance. In fact, it is precisely because the will is the dominant faculty that Scotus adopts many of Aquinas's views while maintaining his Franciscan perspective.

Synderesis for Scotus is the habitual knowledge of principles that is always right. Conscience is for him the habit of making proper practical conclusions. As mentioned, the view here seems decidedly Thomistic: synderesis supplies the general and necessary practical principles that conscience applies to particular situations. Synderesis as the affective/emotional drive to seek the good and the dynamic nature of conscience are lacking. But Scotus's view of the will needs to be taken into account in his limited discussion of conscience and synderesis since it is much more complex than what we find in either Bonaventure or Aquinas.

Scotus follows Anselm (1033–1109) in thinking that there are two affections in the will: an affection for benefit and an affection for justice. The affection for benefit is related to the ability of human beings to seek what brings them happiness. It is in play when human beings seek anything they find good and will bring them pleasure. The affection for justice, however, is the ability to will what people should do. Both affections are innate to human beings and it is because human beings have both affections that they can be free. While the two affections seem to be at odds, since human beings frequently desire as pleasurable what they should not enjoy, they are not in fact opposed to one another. God is the highest good for Scotus and so is the most desired object

according to the affection for benefit. And it is by following the affection for justice that one comes to unity with God, which constitutes the supreme happiness for human beings. Scotus's affection for benefit thus looks very similar to the drive to the good that Bonaventure labeled *synderesis*. It seems that Scotus's more complex view of the will leads him to put into the will the drive that Bonaventure associated with *synderesis*. He has no need to put *synderesis* into the will since his theory of the will already explains human beings' basic drive to the good.

Scotus also thinks that the will is able to direct the intellect in the sense that it receives information from the intellect but is able to cause the intellect to focus on what it chooses the intellect to focus on. And it does this according to what brings pleasure to the will. It is not surprising, then, that Scotus thinks the moral virtues are in the will. Since the will is the dominant faculty and directs the intellect, it needs the discipline involved with the virtues to direct correctly what it deems to be pleasurable.

For Scotus, development of the virtues is complex. Prudence seems to be the key virtue since it is involved in the development of every virtue. He divides the virtue of prudence into "proper prudence" and what he calls the "habit of prudence." The habit of prudence is found in the intellectual order and it is the capacity to develop proper prudences. A proper prudence is a habit for making the proper choice in a particular situation. Each virtue is marked by its own special proper prudence. When one acts bravely, for example, one is acting in accord with the proper prudence of courage in the circumstance. The proper prudence involves both a rule for behavior (what is to be done) and a habit for performing the relevant virtue. The habit is derived from the performance of actions appropriate to the virtue in question.

The scheme Scotus provides here is familiar from Aristotle (and Aquinas). We cultivate the virtues by performing virtuous actions until they become habitual. When these habits transform the agent in such a way that the agent takes pleasure in performing these virtuous actions, the habit becomes a virtue. The difficulty Scotus sees in this picture is the apparent circularity that one must perform a virtuous action in order to achieve the virtue but one cannot perform actions that are virtuous before one has the relevant virtue. Scotus solves this circularity by way of conscience. Through conscience in the intellect, one understands what is to be done in a particular circumstance. One does this by deducing from the general principles discovered by *synderesis* what is appropriate to do. One then acts according to this deduction to do what should be done. So, one acts according to conscience to perform the act that is the basis for habitually acting according to the relevant virtue. With the formation of the habit and the transformation of emotions, so that performance of the acts is pleasurable, the virtue is achieved. Conscience thus plays a key role in how virtues are cultivated.

As we saw in Bonaventure, the less general rules of conscience constantly change in accord with experience. Scotus puts this dynamism into the proper prudences. While the first act of a virtue is through conscience, once one begins to form the habit of these appropriate acts, one begins to modify the rule of the proper prudence by which one acts. One sees the results and effectiveness of one's acts and tries to modify the rule one acts by accordingly. Understanding what one is to do in particular circumstances is thus constantly changing for Scotus and so the rule for what the relevant virtue requires in various circumstances is constantly evolving. Through acting in accord with this changing rule we develop the habit of action leading to the virtue in question. For example, I might use my *synderesis* and conscience to decide that I should not drink alcohol at a party. I have been taught that inebriation leads to foolish behavior and so I do not drink at a friend's wedding party. On another occasion, I allow myself to have one or two drinks and see that they do not render me foolish. On another occasion, I drink several glasses of liquor and dance foolishly with a lampshade on my head. Looking at my drinking pattern, I decide that temperance for me is to enjoy a couple of drinks but not to go beyond this limit. I follow this rule and form the habit of drinking a moderate amount at parties. Eventually, I find that I have become a person

who enjoys moderate drinking and enjoys not going beyond a moderate amount of alcohol. Had I not begun my development by using my conscience to perform my first act of not consuming alcohol, I would not have developed temperance. If I had not modified my rule of behavior in accordance with my experience of drinking alcohol at parties, I would not have reached the temperance I sought.

Scotus holds that the development of any virtue involves prudence in the way described. He also thinks that the development of any virtue makes one more apt to develop the other virtues. When we develop any proper prudence for any virtue, we also create in our intellect a habit of prudence. This is our capacity to develop rules of behavior associated with any virtue. If we develop temperance, for example, this development has given us the capacity to develop rules for courage, for example. And, presumably, the more virtues we develop, the more developed our capacity for generating new virtues becomes. Scotus sums this up by saying that the general habit of prudence virtually contains the moral virtues. What he has in mind is similar to learning new languages. Once one learns some foreign language, it is easier to learn another language because one has developed the skills of concentration, constant review, recognition of grammar, notable exceptions to rules, and so on that make the next language easier to learn.

Scotus's views about *synderesis* and conscience are complex but clearly draw from both Bonaventure and Aquinas. Most importantly his views follow the turn to the virtues we see in Aquinas's work. He does not spend much time on either *synderesis* or conscience. Issues traditionally discussed under these two notions are treated by him in terms of development of the virtues, especially prudence, which is both an intellectual virtue and a moral virtue.

William Ockham (1288–1347) follows Scotus's views on conscience and the virtues but offers a number of corrections to them. Surprisingly, Ockham does not mention *synderesis* at all. Whether he rejected the notion or found it superfluous to what he called moral knowledge is not clear. According to him, moral knowledge is of two types: all knowledge that can be derived from doctrine, and knowledge that is derived purely from experience without the aid of doctrine. The second type of knowledge seems similar to Bonaventure's view of conscience as dynamic. The first type might well be similar to Aquinas's view that general moral principles are apprehended through *synderesis*.

Ockham, like Scotus, asserts that no moral virtue or any virtuous act can exist without prudence. This is because no act can be virtuous unless it is in conformity with right reason. But Ockham has very complicated distinctions concerning prudence and the virtues in general. Ockham thinks that there are four different types of prudence and claims that virtues themselves come in five different grades.

In his discussions of moral knowledge and prudence, Ockham criticizes Scotus for holding that all moral actions must be directed by a proper prudence derived through practice. According to Ockham, moral actions can be directed by knowledge that is taught rather than experienced. His criticism here is perhaps a result of his more detailed discussion of types of prudence and grades of the virtues. In agreement with Scotus, however, Ockham holds that conscience provides a right reason that guides the performance of a moral act that may lead to a type of prudence. Indeed, many of Ockham's comments on conscience and the virtues appear to be elaborations on views Scotus expressed.

Ockham, however, is quite critical of Scotus for holding that both internal and external actions have moral worth. According to Ockham, only internal acts of the will are morally meritorious. External acts are morally significant only indirectly by being related to internal actions that have intrinsic moral worth. There is little doubt that Ockham's view here influences Martin Luther's view that external actions need not reflect the internal state of the individual. The influence undoubtedly comes through Luther's teachers in the faculties of Theology and Philosophy at Erfurt who were trained in a scholasticism heavily influenced by Ockham's thought as interpreted by

Gabriel Biel. Perhaps this influence helps to explain why Luther dismissed the whole notion of synderesis in his mature thought.

In general, the view of conscience presented by Scotus and Ockham is a combination of the views of Bonaventure and Aquinas. In line with Bonaventure's position, conscience is closely connected to the drive to the good as well as to both the intellectual and emotional parts of human beings. It is a dynamic part of the human being constantly modified through experience. In line with Aquinas, Scotus and Ockham closely relate conscience to practical reasoning and the development of the virtues, particularly prudence. Importantly, with Scotus and Ockham what began in Jerome's and Philip the Chancellor's discussions of conscience and synderesis ended with an increasingly elaborate discussion of the development and importance of the virtues.

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ATONEMENT

Thomas Williams

There is a standard potted history of atonement theory—taught, it would appear, in seminaries and divinity schools—in which Anselm figures as the villain who foisted penal substitution on a Latin West that was altogether too eager to embrace it, along with its associated ideology of violence. Peter Abelard, by contrast, spoke of Christ as a moral exemplar and of his passion as an act of love that would kindle an answering love in the heart of the believer; but in setting forth this appealing alternative his was nearly a lone voice, drowned out by a chorus of theologians interpreting the cross in terms of divine wrath, punishment, and sacrifice. This story makes periodic intrusions into popular theological consciousness through debates over episcopal elections¹ and new hymnals,² and it is well-represented in the scholarly literature.³

But the story is largely false. Anselm did not teach penal substitution; Abelard did. The notion of wrath plays no role at all in Anselm's positive account of the redemption, which also makes no mention of blood and almost no mention of the cross; and Abelard's emphasis on the change of heart wrought by a discerning response to the Passion found echoes in many of the scholastic theologians who developed Anselm's account.

In order to provide a more accurate account of medieval thinking about the atonement, I will begin with a brief discussion of the main lines of theological discussion before Anselm's day. I then look at Anselm's reasons for rejecting the dominant account of earlier theologians before turning to a detailed examination of his positive account of the atonement. Next, I lay out Abelard's discussion of the saving work of Christ in his commentary on the book of *Romans*. In the final section of the chapter, I examine the ways in which theologians of the twelfth through fourteenth centuries developed both Anselmian and Abelardian themes in their reflections on the atonement.

Medieval Atonement Theory Before Anselm

Early Christian writings on atonement are not chiefly in the business of presenting theories, if by theory we mean something like a systematic account of how, exactly—by what means, or through what sort of transaction or mechanism—Christ accomplishes reconciliation between God and humanity. Christian writers of the first few centuries proclaimed such reconciliation as a fact and employed a variety of metaphors and images to elucidate it. They spoke of a cosmic struggle in which Christ achieved a decisive victory, of the return of a king to restore order in his own dominions, of the mystical inclusion of sinful humanity in the perfect humanity of the Incarnate Word. We therefore do them an injustice if we approach them solely with an eye to finding whatever it was that did for them what penal substitution, say, did for later writers.

But for the purpose of introducing medieval speculation on atonement, the injustice is necessary. And what we find when we search in early Christian writing for a counterpart to penal substitution is the ransom theory. Drawing on passages such as Mark 10:45 and Matthew 20:28—"For the Son of Man also came not to be served but to serve, and to give his life as a ransom for many"—many early Christian writers spoke of Christ's death on the cross as a ransom. A ransom is a price paid to redeem captives. The price is Christ's death and the captives are sinful human beings: but to whom is the price paid? According to many of the church fathers, the ransom is paid to the devil, who had acquired some sort of rights over humanity by successfully tempting our first parents to disobey God. Origen, for example, writes as follows:

To whom did he give his life as a ransom for many? Not, certainly, to God. Was it not, then, to the evil one? He had us in his power until the ransom for us—the life of Jesus—was paid to him, mistaken as he was in supposing that he could gain the mastery over that life, and not seeing that he could not bear the agony of holding it.⁴

Versions of this theory, sometimes developed in quite striking ways (such as Gregory of Nyssa's idea that God tricked the devil into overreaching by veiling the divinity of Christ in human flesh), can be found in a number of writers, but it is through Augustine that the ransom theory became a foundation of early medieval thinking about atonement.

According to Augustine, it was by God's justice that human beings were delivered into the power of the devil as punishment for their disobedience,⁵ and it was therefore fitting that God should overcome the devil through justice rather than (as was certainly possible for God) through mere force:

It was right for the devil to be overcome, not by God's power, but by his justice. For what is more powerful than the All-Powerful? What creature can compare in power to the All-Powerful? But because the devil in his wicked perversity had come to love power and to reject and contend against justice . . . it pleased God, in order to rescue humanity from the devil's power, to overcome the devil not by power but by justice . . . It is not that power is something bad and to be avoided, but there is an order to be observed; and in that order justice comes first.⁶

Augustine continues:

What, then, is this justice by which the devil was overcome? Precisely the justice of Jesus Christ. And how was he overcome? It was because he found nothing worthy of death in Christ, yet he killed him. And indeed it is just that the debtors whom he had in his control should be set free by believing in the one whom he killed even though no debt was owed.

"Even though no debt was owed" translates *sine ullo debito*, which Augustine uses to emphasize two related claims. First, Christ need not have died. Not having inherited the corrupted humanity passed on by Adam and Eve, he did not "owe" death; instead, as Jesus says of himself in the fourth gospel, "I lay down my life that I may take it up again. No one takes it from me: I lay it down of my own accord. I have the power to lay it down and the power to take it up again" (John 10:17–18).⁷ And second, Christ was perfectly sinless, which was why the devil was guilty of injustice in killing him and therefore "most justly lost those who, because of their sin, had deserved to be under his control."⁸

Latin writers between Augustine and Anselm will typically agree, with variations of emphasis and detail, that the devil had some rights over humanity that it was fitting (though not necessary)

for God to recognize, rights that the devil forfeited by his unjust aggression against the sinless Christ.⁹ It is not surprising, then, that Anselm would seek to clear the ground for his rather different understanding of the atonement by attacking the ransom theory.

Anselm's Critique

Anselm puts his criticisms in the mouth of his interlocutor, Boso, who sets the agenda for *Cur Deus Homo* by offering, on behalf of unbelievers, the objection that the Christian account of redemption must impugn either God's power or his wisdom:

If you say that God—who you say created all things by his command—could not have accomplished all these things simply by commanding them, you are contradicting yourselves, since you are making him out to be powerless. On the other hand, if you acknowledge that he could have done all this simply by commanding it, but that he did not will to do it except in the way you describe, how will you be able to show that he is wise, when you claim that he willed to suffer such indignities for no reason at all? . . . if indeed God was unwilling to save the human race except in the way you describe, when he could have done so through his will alone, face up to how you are impugning his wisdom—to put it mildly.¹⁰

Boso presents the ransom theory as a standard, but clearly unacceptable, answer to this challenge:

Now we are also accustomed to say that in order to liberate humanity God was obligated to act against the devil through justice before he acted through force, so that when the devil killed him who did not deserve death and who was God, he would justly lose the power that he held over sinners. Otherwise, God would have inflicted unjust force on the devil, since the devil justly had possession of human beings, whom he had not captured by force, but who had delivered themselves up to him of their own accord. But I do not see how this has any cogency.¹¹

Boso argues that God remains sovereign even over sinful creatures. Both the devil and human beings are still God's own possession; God retains his prerogative to do as he pleases "with his own, about his own, in his own."¹² So although human beings deserved to be punished, and it was appropriate for the devil to punish them, God had every right to remove human beings from the devil's jurisdiction. The devil had acquired no rights over human beings; far from deserving to punish them, he deserved to be punished along with them. Boso speculates that at the root of the theory of the devil's rights is a fundamental confusion:

I also think that those who hold that the devil had some just claim to possess humanity are brought to this view because they see that humanity was justly subject to the devil's persecution and that God justly permitted it; and on those grounds they suppose that the devil justly inflicted it.¹³

But that doesn't follow, he objects. Suppose I deserve to be struck, but you are not the one entitled to strike me. Then your striking me is just if we describe it as "my being struck," for I deserve to be struck, but unjust if we describe it as "your striking me," for you have no right to strike me. And such is the case for humanity's suffering at the hands of the devil. It is just if we describe it as "God's permitting humanity to suffer at the hands of the devil," for God acts wisely and justly in bringing good out of such evil, or as "humanity's being punished by the devil," for we deserve to be punished, but not as "the devil's punishing humanity," for the devil has no right to punish us and acts out of malice and an unjust will.¹⁴

Boso is allowed to deliver his criticisms¹⁵ without interruption and without comment, but Anselm (the author) apparently means us to regard them as decisive, since Anselm (the character) drops the subject for good and resumes the discussion by saying that surely God must have had *some* reason for acting as he did, even if we cannot see what it was.¹⁶ But outside *Cur Deus Homo* the ransom theory was not killed off all at once. Two generations later, Bernard of Clairvaux still regarded the notion of a price paid to the devil as a non-negotiable element of orthodoxy and vehemently criticized Peter Abelard for raising objections¹⁷ very much like Anselm's:

Which am I to think is more intolerable in these words: their blasphemy or their arrogance? Which is more damnable: their insolence or their impiety? Would not the mouth of the one who speaks such things be more justly beaten with rods than refuted with arguments?¹⁸

Peter Lombard, too, would present a version of the ransom theory in his *Sentences* (by way of extensive quotations from Augustine). But these twelfth-century reaffirmations of the theory would represent its last serious appearance on the medieval stage, and even there it is evident that the theory does not express the best or most considered thoughts of its ostensible proponents. L. W. Grensted puts this well:

In almost every writer we find [the] deficiencies [of the ransom theory] made good by the introduction of ideas of a widely different character, though not as yet crystallized into definite theory, until at last in Bernard, and again in Peter Lombard, we find the old transactional language adopted and defended simply because it is the language of tradition, hallowed by its association with the fathers of the Church, and not lightly to be thrown aside, even though now inadequate to carry the thought of those who use it.¹⁹

Anselm's Account of the Atonement²⁰

So the objections that Boso raises on behalf of unbelievers cannot be met by an appeal to the ransom theory, but Anselm does think he can meet them. In principle, it would seem that there are two approaches he could take. One would be to argue that although God could have reconciled humanity to himself by some means other than the passion and death of Christ, he did not act irrationally or unwisely in bringing about redemption in the way Christians say he did. The other would be to argue that God could not have redeemed humanity in any other way. But Anselm rules out the first approach because he thinks no such argument would be persuasive to an unbeliever who finds the initial objections compelling. Appeals to the rational beauty or poetic fittingness of the Christian account of redemption, though doubtless devotionally profitable for those who already accept that account, are useless as means of persuasion for those who remain unconvinced. So Anselm commits himself to arguing that God could not reconcile humanity to himself otherwise than by becoming incarnate and dying.²¹ And because it would be open to the objector to say that, in that case, it would have been seemlier and more reasonable for God to have left human beings unsaved, rather than subjecting himself to pain and death, Anselm must also argue that if human beings fall into sin, God cannot simply leave them unsaved. Thus, the central positive argument of *Cur Deus Homo* can be summarized as follows:

- 1 Necessarily, if human beings sin, God offers them reconciliation.
- 2 Necessarily, if God does not become incarnate and die, God does not offer reconciliation to human beings.

And therefore:

3 Necessarily, if human beings sin, God becomes incarnate and dies.

Anselm attempts to make this argument “*remoto Christo*,” that is, without appeal to any of the details of the Christian story, for the unbelievers who are the targets of the argument do not accept that story. As a result, and contrary to what one often reads, there is next to nothing in *Cur Deus Homo* about blood or violence or even the cross.²² For Anselm thinks that reason alone can show that God must affect reconciliation through the voluntary death of a God-man, but of course no amount of argument would reveal that this death was a painful and bloody crucifixion.

Anselm argues for (1) by appealing to God’s purpose in creating human beings. God gave human beings rationality so that they might love him, the supreme good, for his own sake and all other things for his sake, and in loving him would be fully happy. God’s purpose for human beings does not change simply because we have thrown away the justice with which we were created. So if God were to leave human beings in a state of injustice and unhappiness, he would fail in his purpose; he would have created human beings in vain. He must therefore offer reconciliation to human beings.

But why must he do so by becoming incarnate and laying down his life? Anselm’s argument for (2) begins with the observation that any sin, however apparently trivial, is infinitely serious, not because human beings are infinitely important, but because sins are affronts to the infinite majesty of God. God cannot, as a matter of justice, simply cancel the infinite debt of sin. The debt must be paid, either by way of punishment or by way of satisfaction.²³ Punishment satisfies the demands of justice, but it leaves humanity unreconciled with God and thus is ruled out by (1); therefore, some satisfaction must be offered.²⁴ The one who makes the satisfaction must be a human being, since only a human being can pay what human beings owe. Yet only God can make this satisfaction, since the satisfaction must be proportionate to the sin, which is infinitely serious; and only God can give something of his own that is of infinite value. Therefore, the one who makes the satisfaction must be both God and man, a single being in whom two natures are united, and he makes this satisfaction by voluntarily laying down his life for the honor of God.

Abelard’s Commentary on Romans²⁵

Unlike Anselm, Abelard did not set out to provide a systematic account of the atonement; nor was he principally interested in defending the rationality of the Christian account against objections from unbelievers. His understanding of the saving work of Christ must be pieced together from somewhat scattered observations throughout his Commentary on *Romans*, both in the *ad litteram* commentary on particular passages and in two *quaestiones* (excursuses of modest length) on original sin and atonement.

Although (as I have noted) Abelard agreed with Anselm in rejecting the idea of a ransom paid to the devil, he did find it fruitful to think of humanity as being in a sense held captive, not by the devil, but by sin itself. This dominion of sin had two aspects, which we can call objective and subjective. The objective dominion of sin is our liability to the just punishment of sin. The subjective dominion of sin is the disordering of our desires by concupiscence, which hinders us from willing what we know is right. Abelard argues that the death of Christ frees us from the dominion of sin in both its aspects.

The death of Christ frees us from the objective dominion of sin by bearing the punishment for sin on our behalf. In other words, Abelard explicitly teaches penal substitution. In the *quaestio* on original sin, Abelard says that Christ bore our sins on the cross in the sense that he bore the

punishment for our sins so that we would not have to; as a result, our sins are “dismissed,” which for Abelard is equivalent to saying that the punishment to which we would otherwise have been subjected is canceled.²⁶ And in commenting on Romans 4:25, where Paul says that Christ “was handed over on account of our sins,” Abelard comments,

There are two ways in which Christ is said to have died *on account of our sins*. First, the transgressions on account of which he died were ours, and we committed the sins whose punishment he bore. And second, by dying he took away our sins: that is, he removed the punishment for our sins at the cost of his death.²⁷

The death of Christ frees us from the subjective dominion of sin by conveying God’s love to us and thereby freeing us from disobeying God because of concupiscence or obeying him unworthily, out of fear rather than love. I use the word “conveying” advisedly: it is ambiguous between “demonstrating” and “transmitting.” A purely exemplarist reading of Abelard sees the passion as a *demonstration* of God’s love for humanity, inspiring our gratitude and love in the same way as a human benefactor’s kindness would inspire our gratitude and love. Undoubtedly Abelard speaks in this way, thereby inviting Bernard’s polemic that Abelard “makes the glory of our redemption and the pinnacle of our salvation consist, not in the power of the cross or the price of Christ’s blood, but in the improvement of our own way of life.”²⁸ But it is clear that Abelard intends more than this. The passion not only demonstrates God’s love but somehow *transmits* it: “divine love . . . [is] given and offered to us through” Jesus.²⁹ This part of the account, however, is not fleshed out in Abelard’s work.³⁰

Further Developments

The influence of Anselm on later medieval thinking on the atonement can be seen in the centrality of the notion of satisfaction. But there are other concepts and themes, not present or not prominent in Anselm, that come to play important roles in scholastic discussions of atonement. These notions give a fullness to later discussions that Anselm’s account, focused as it was on a narrowly defined problem, arguably lacks—though this fullness sometimes comes at the expense of systematicity or even coherence. Moreover, even the notion of satisfaction is frequently treated in un-Anselmian ways.

To begin with the last point, one finds widespread agreement that the death of the God-man provides the only adequate satisfaction for sin; but most scholastic authors agree that God could have redeemed humanity without any such satisfaction. In the *Summa* attributed to Alexander of Hales, for example, we find the argument that it would have been consistent with the justice that is God’s very nature for God to redeem humanity without any satisfaction being made at all.³¹ Bonaventure drew a similar conclusion from the notion of divine power:

Undoubtedly God could have freed and restored the human race in some other way . . . For no limit should be placed on divine power. Indeed, just as God had the power to create the human race, so too he had the power to restore it, by the sheer affirmation (*nutus*) of his mind and command of his will.³²

Contrary to what Anselm held, “God could have wiped out all demerits and reestablished humanity in its prior state, and nothing would have remained unordered, or even unpunished, in the universe, since sin carries with it its own punishment.”³³ It was more suitable for God to accomplish redemption by way of satisfaction than in any other way,³⁴ but there was no necessity involved.

Alongside the Anselmian notion of satisfaction we find extensive discussion of the idea of merit. To make satisfaction is to repay a debt or restore a just state of affairs; to merit is to achieve a reward. There was no standard view of the respective roles of satisfaction and merit in Christ's saving work, and indeed it is often difficult to see how the notions function together in a particular thinker's understanding of the atonement; but in general the notion of merit has wider application than that of satisfaction. For example, as unpromising as it might look to contemporary theological sensibilities, the standard scholastic question, "Did Christ merit from the moment of his conception?" shows a keen appreciation of the potential redemptive significance of the whole of Christ's incarnate life, rather than an exclusive focus on the cross. I will illustrate the complexities of scholastic treatments of satisfaction and merit by examining Thomas Aquinas.³⁵

Aquinas accepts the dominant medieval view that the breach between God and humanity could have been repaired without any suffering on the part of Christ. But there was no more fitting way for humanity to be set free than the passion of Christ:

A way of attaining a given end is more fitting to the extent that that way incorporates more things that are serviceable for that end. And the liberation of humanity through Christ's passion incorporates several things that pertain to human salvation, in addition to liberation from sin. First, through Christ's passion human beings recognize how much God loves them and are thereby stirred to love God, which is what constitutes the completion of human salvation . . . Second, by his passion he gave us an example of obedience, humility, constancy, justice, and other virtues . . . Third, through his passion Christ not only freed human beings from sin but also merited for them justifying grace and the glory of happiness . . . Fourth, his passion declares to human beings a greater urgency in keeping themselves unstained by sin . . . Fifth, his passion brought greater dignity to humanity: just as human beings had been overcome and deceived by the devil, it would also be a human being who overcame the devil; and just as human beings had deserved death, so too a human being, by dying, would overcome death.³⁶

Aquinas does not seek to bring these disparate themes—as well as others that arise elsewhere in his discussions of the atonement—into any systematic coherence, and scholarly attempts to impose a rigid conceptual scheme of hierarchical or conceptual relationships on this variety of elements are unconvincing.³⁷

Consider first the notion of merit. For Aquinas, merit operates through the relationship of Christ as Head to the Church as his body. Christ merits grace not only for himself as an individual "but insofar as he is Head of the Church, so that grace might overflow from him to the members."³⁸ Christ in fact merited eternal salvation for us from the first moment of his conception,³⁹ "but there were obstacles on our part that were preventing us from attaining the effect of those previous merits; hence, in order to remove those obstacles, it was fitting for Christ to suffer."⁴⁰ What were these obstacles? Aquinas points us back to his explanation of the superior fittingness of liberation through the passion, so presumably the obstacles were the moral deficiencies and weakness that the passion remedied.

Merit is just the first of the four ways in which Christ's passion affects human salvation, according to Aquinas. It does so also by way of satisfaction, sacrifice, and redemption. To begin with satisfaction: to make satisfaction for an offense is to offer to the offended party something that he loves as much as or more than he hates the offense. And "by suffering out of charity and obedience, Christ offered God something greater than was required as a recompense for the whole offense of the human race."⁴¹ It is "not merely a sufficient but indeed a superabundant satisfaction for the sins of the human race" because of the greatness of the charity with which he bore his suffering, the worth of the divine-human life that he laid down as a satisfaction, and the scope of his

suffering and the greatness of his pain.⁴² And because Head and members are one mystical person, the satisfaction that Christ makes belongs to all the baptized as members of Christ.⁴³ Thus note that the mystical union between Christ and his Church, into which human beings are incorporated by baptism, is a key part of the mechanism (so to speak) by which both merit and satisfaction affect human salvation.

Christ's death also affects human salvation as a sacrifice:

Something done for the honor that is properly owed to God, in order to conciliate him, is properly called a sacrifice . . . "Now Christ offered himself for us in his passion," and this very deed—Christ's voluntarily undergoing suffering—was in the highest degree acceptable to God, because it proceeded from charity. Thus it is clear that Christ's passion was a true sacrifice.⁴⁴

It might seem that sacrifice, so understood, is difficult to distinguish from satisfaction; and indeed in the next question the notion of sacrifice is discussed in the same language, and with the same definition, that Aquinas uses to explain satisfaction.⁴⁵

The fourth way in which Christ's passion affects human salvation is as a redemption. At one point Aquinas understands redemption entirely in terms of satisfaction: "Because Christ's passion was a sufficient and superabundant satisfaction for the sin and guilt of the human race, his passion was a sort of price by which we were set free from both obligations," that is, from both servitude to sin and liability to punishment in accordance with God's justice.⁴⁶ Elsewhere he understands it in terms of merit, invoking again the mystical union between Christ and the Church.⁴⁷

As we have seen, Aquinas says that Christ's "passion was a sort of price by which we were set free from" servitude to sin, and for Aquinas one way of understanding servitude to sin is as servitude to the devil. It is in this context that the old theory of the devil's overreaching makes an unexpected return appearance:

There are three aspects of the power that the devil had over human beings before Christ's passion that need to be taken into account. The first concerns human beings, who by their sin had deserved to be handed over to the power of the devil, by whose tempting they were overcome. The second concerns God, whom human beings had offended by sinning, and who, in accordance with his justice, turned human beings over to the power of the devil. The third concerns the devil himself, who by his most wicked will was preventing human beings from attaining salvation. As for the first, human beings were freed from the power of the devil by Christ's passion in that his passion is a cause of the forgiveness of sins, as has been said. As for the second, what should be said is that Christ's passion freed us from the power of the devil by reconciling us to God, as will be said below. As for the third, Christ's passion freed us from the devil because in Christ's passion the devil overstepped the boundaries of the power that God had handed over to him, by conniving at the death of Christ who, being sinless, did not deserve death. This is why Augustine says in *De Trinitate* XIII that the devil was overcome by the justice of Christ, "because he found nothing worthy of death in Christ, yet he killed him. And indeed it is just that the debtors whom he had in his control should be set free by believing in the one whom he killed even though no debt was owed."⁴⁸

This is not the only place in which the theory of the devil's rights appears in Aquinas,⁴⁹ but it seems fair to say that the theory appears only vestigially, with a nod to Augustine's authority and indeed almost wholly in Augustine's words.⁵⁰ It is the other themes already mentioned—of which merit, satisfaction, and the sacramental appropriation of the benefits of Christ's passion are the most prominent—that lie at the heart of Aquinas's account.

Notes

- 1 In 2009 the bishop-elect of the Episcopal Diocese of Northern Michigan, Kevin Thew Forrester, came under scrutiny for a number of reasons, including what some regarded as an insufficiently orthodox understanding of the atonement. Fr. Thew Forrester and his defenders frequently invoked some version of the standard history sketched here. In the end, his election did not receive the necessary consents, and a new election was held.
- 2 The committee charged with developing a new hymnal for the Presbyterian Church (USA) made news in 2013 for its decision to exclude the popular song “In Christ Alone” because of objections to the words “till on that cross, as Jesus died, the wrath of God was satisfied”—words that some members of the committee complained were objectionably Anselmian.
- 3 Bartlett (2001) provides a particularly influential recent statement of the standard history. See Bynum (2004) for further references, a fuller account of the standard history than I have given here, and abundant argument in support of the claim that “There seems to be a lot wrong with this general picture” (179).
- 4 *In Matt.* 16.8. All translations are my own.
- 5 *De Trinitate* 13.12.16. The passive voice is intentional: according to Augustine, God permitted, but did not bring it about, that humanity fell under the devil’s control.
- 6 *De Trinitate* 13.13.17.
- 7 *De Trinitate* 4.13.16. Anselm will follow this emphasis in *Cur Deus Homo*, repeatedly quoting or alluding to these verses and exercising all his ingenuity in reinterpreting other passages of Scripture that appear to assert some necessity or obligation at odds with Christ’s sovereign and free self-offering.
- 8 *Enchiridion* 14.49.
- 9 See, for example, Leo the Great, *Sermon* 22; Gregory the Great, *Moralia in Iob* 3.14–16, 17.30, 33.7.
- 10 *Cur Deus Homo* I.6.
- 11 *Cur Deus Homo* I.7.
- 12 *Ibid.*
- 13 *Ibid.*
- 14 The doctrine that one and the same action can take on opposite characteristics if considered in different ways is no *ad hoc* move on Anselm’s part. He employs it frequently, applying it not only to statements of value (involving words such as “just,” “right,” and “ought”) but also to modal statements (involving words such as “can” and “possible”). For a brief discussion, see Visser and Williams (2004: 50).
- 15 He also devotes a paragraph to rebutting the idea that the “handwriting of the decree” (Col. 2:14) conferred rights on the devil; I omit this argument for the sake of space.
- 16 *Cur Deus Homo* I.8.
- 17 *Comm. Rom.* 114–117.
- 18 Letter 190.
- 19 Grensted (1920: 56). Grensted’s work deserves to be better known. Considerably more even-handed and textually responsible than other standard works, it is the most adequate history of atonement theory currently available in English, though the time is certainly right for a new full-scale treatment of the matter.
- 20 I have explored Anselm’s account in greater detail in Visser and Williams (2009: 213–242). I have also drawn here on a talk entitled “Anselm: Everything You Learned in Seminary Is False” (URL=<<http://frthomaswilliams.com/Anselm on Atonement.mp3>>).
- 21 By affirming that there was only one possible means of redemption for humanity, Anselm was departing from the consensus of earlier writers in the Latin tradition, such as Augustine and Leo the Great; later medieval writers, even those who are strongly influenced by Anselm in other respects, almost uniformly reject his teaching on this point.
- 22 For example, “*sanguis*” (blood) appears only three times in *Cur Deus Homo*, always in voicing the objections of unbelievers and never in the course of Anselm’s own positive argument. “*Crux*” (cross) appears twice, in quotations from Philippians 2:8, when Anselm is arguing that Scripture does not imply, contrary to what reason shows, that Christ’s death was something imposed on him by necessity. There is simply no foundation for the notion that Anselm’s account of the atonement valorizes blood and violence.
- 23 In discussing Anselm, my preference is to translate *satisfactio* as “recompense” rather than “satisfaction,” for reasons suggested by Brown (2004: 290–295). In this essay, however, I use “satisfaction,” which is almost universally used in scholarly discussions of later scholastic authors, so as not to obscure that they and Anselm are all using the same Latin word. Nothing, of course, follows as to whether they all mean the same thing, or intend the same concept, when using that word.

- 24 Note, then, that Anselm's account is in no way penal. Punishment, for Anselm, would be unavailing for the purposes of reconciling humanity with God, and Christ's death is in no sense a punishment that he endured in our stead.
- 25 I have discussed Abelard's account in greater detail in Williams (2004).
- 26 *Comm. Rom.* 164, 175.
- 27 *Comm. Rom.* 153. See also the commentary on Romans 8:3, *Comm. Rom.* 211, where Abelard speaks of "the punishment for sin that [Christ] bore for us in the flesh."
- 28 "Letter 190," 37.
- 29 *Comm. Rom.* 210.
- 30 I have offered what I take to be a natural development of the account—Abelardian, though not explicitly Abelard's—in Williams (2004: 269–275).
- 31 *Summa halensis* III.1.4–7.
- 32 *In Sent.* III. 20.6.
- 33 *In Sent.* III.20.6 dubium 4.
- 34 *In Sent.* III. 20.2.
- 35 Aquinas is by no means alone among scholastic authors in making room for both satisfaction and merit, alongside other themes, in treating the atonement. Limitations of space prevent any discussion of other scholastics here, but for an overview of John Duns Scotus's account, see Cross (1999: 129–132).
- 36 ST III.46.3. Johnson (2010) is correct in drawing attention to the number of disparate themes that Aquinas includes in his atonement theology; but his contention that "For Thomas *convenire* refers primarily to the bringing together of various things" (305) is not sustained by the texts. Even in the passage translated here, the first sentence expresses a criterion for something's being *convenientior*, not a definition of *conveniens*.
- 37 For example, Eleonore Stump (2003: 430) regiments Aquinas's use of merit and satisfaction, so that Christ's passion and death *qua* satisfaction "are the solution to the problem of past sin" and *qua* meriting grace "the solution to the problem of future sin." I can find no textual support for this reading of the relationship between merit and satisfaction.
- 38 ST III.48.1.
- 39 ST III.34.3; 48.1 obj. 2.
- 40 ST III.48.1 ad 2.
- 41 ST III.48.2.
- 42 ST III.48.2.
- 43 ST III.48.2 ad 1.
- 44 ST III.48.3.
- 45 ST III.49.4.
- 46 ST III.48.4.
- 47 ST III.49.1.
- 48 ST III.49.2.
- 49 In the ST we find it also at III.46.3 ad 3.
- 50 Pace Johnson (2010: 307–309), whose failure to distinguish between the narrow theory of the devil's rights and the broader theme of liberation from the devil leads him to overstate the importance of the former in Aquinas's thought.

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PART VII

Political Philosophy

LAW AND GOVERNMENT

Jonathan Jacobs

Medieval political thought contains a great deal of analytically astute and highly sophisticated argumentation and theorizing. Medieval thought concerning the claims of various legal authorities and how and why one rather than another has priority is very rich. Different authorities and legal principles were often in conflict and those authorities and principles were connected with fundamental values concerning temporal and spiritual life. The conflict between the papacy and temporal authorities is perhaps the most visible of the conflicts but there were many controversies concerning authority and they challenged thinkers to articulate conceptions of the scope of legitimate power, the rule of law, and the authority to sanction. Also, it was during the Middle Ages that recognizably early modern conceptions of state and church and political institutions began to be formulated. It was a period of remarkable intellectual gestation.

This chapter highlights some of the main views and developments in medieval political thought. The discussion includes three topically organized sections. I begin with some remarks on context, background, and the significance of custom. The second section focuses on fundamental medieval concepts concerning rights, property, and political obligation, particularly as understood in terms of feudal society. That is followed by a discussion of the contests between secular authority and spiritual authority and the emerging conception of the nation-state.

Custom

Our focus is almost exclusively on Latin medieval thought. There are a couple of reasons for this. One is that Christianity was the dominant religion of the lands that became the nations of modern Europe. There was an Islamic presence in Europe even after the Middle Ages and in places that presence continued until nearly the sixteenth century. But the geographical region of the medieval world that is most continuous with the political history of modern Europe (and also the New World) is what was often referred to as “Christendom.” There were Jewish communities, too, but Jews did not have political sovereignty (though they sometimes had their own community administration and courts) and medieval Jewish political thought often addressed issues arising from Jewish exile and diaspora, an important set of concerns but not among those shaping the main lines of European political thought. Islamic and Jewish thinkers wrote important works addressing politics and had a key role in the transmission of the ancient inheritance to the Latin West. But there simply is not the space here to try to give them their due, even just briefly. A second reason for focusing on Christian thought is that questions regarding the scope and character of

church power and questions concerning relations between ecclesiastical and temporal power were centrally important to medieval Europe.

Many of the main issues for political thought were informed by Christian conceptions of humanity's place in the created order, of human nature, and divine governance of the world. What Christianity implied for politics was among the most pronounced features of medieval political thought.

While our focus is on Christianity's relevance to medieval politics some important common elements of the three Abrahamic monotheisms merit mention. Among them (*especially* in medieval thought) was the notion that human beings are created in the image of God and that reality exhibits a normative, hierarchical order. There were thought to be various orders of intelligences between human beings and God, and while revelation and grace show that being united with God is possible for human beings, the sublunar order of reality we inhabit is one in which corruption and passing away occur. It is far from the perfection a rational agent can aspire to attain with divine guidance and assistance.

This is relevant as an important background consideration insofar as the medievals did not tend to think in terms of progress, or in terms of human beings making fundamental improvements to the world, or in terms of human beings having the role of designing and constructing the overall order in which they are to live. Instead, human beings are remote from the perfect *origin* of things and the medievals tended to think of *origins* as having normative weight and authority. Especially during the earlier periods of the Middle Ages it was widely held that the social and political structures in which people are to live are inherited; they are *given* rather than *made*. We should be careful to not overstate this; Roman law had considerable influence, and that was a human construction. However, in much of the medieval understanding of law and political order custom had very considerable authority. It was common to claim that the articulation of law was a rendering explicit of law, transmitted by custom, with its origin in a remote past.

The significance of custom had much-diminished resonance in the post-Enlightenment West, especially in those places where explicit projects of constitution writing and the design of institutions were undertaken. Moreover, popular sovereignty, constitutionalism, the formal separation of powers, and democratic accountability, all of which are features of politics that many moderns are likely to regard as essential were not concerns of medieval politics either at all or at least, not in the way they became concerns of modern politics. It is worth considering the significance of custom in medieval political thought not just for the sake of understanding the time, but also because changed views of the authority of custom were important in the development of later thought.

The authority of custom was so great that even positive law was often interpreted as the articulation of customary law rather than being regarded as a formulation coming into being as original legislation. However, the notion that custom reflected reason or that it reflected the will of the people, even if there was no historical record of the people making law, was fairly common. Of course, human agents articulated law explicitly but for much of the Middle Ages that process was interpreted as an articulation of legislative authority that did not reside in this or that human agent or institution as an original maker of law. As Ewart Lewis writes, "From their early sources, the civilists and canonists learned to think that positive law was based on the human recognition of norms of right not dependent on human construction but rooted in the very nature of the world."¹

Political practice throughout much of the Middle Ages had little scope for the notion of law as an explicit expression of will. Early medieval thinkers did not attempt to explicate custom in terms of reason or rational principles, but with the passage of time there were increasingly ambitious attempts to articulate and justify law on the basis of rational (rather than merely customary) considerations. This project often involved a central role for natural law.

Natural law had sources in ancient, particularly Stoic thought and was sometimes mediated by the influence of Roman civil law and the notion of *jus gentium*. The latter, the law of peoples, was

thought to express those principles applying to human beings anywhere on account of reflecting considerations grounded in natural reason. The natural law tradition provided a conceptual framework for articulating rational, universal considerations much more effectively than the appeals to custom. Medieval natural law theorizing is an excellent example of how, for a great many medieval thinkers, it was important to find the bases of authority in a ground other than human volition or agreement. Along with the Stoics Patristic sources also were important influences. In each of those cases, the conception of natural law was a conception of something fundamental to which persons are to be responsive.

Whether custom or natural law was regarded as an anchoring authority the Christian understanding of fallenness had important implications for political thought. The profound wounding of human nature and the loss of its original integrity through the first sin, the wounding transmitted to all future generations, is a basis for the view that not only are human beings distanced from the First Cause in the normative order of reality but that, left to our own devices, humans will almost surely make things worse rather than improve them. Greed, envy, dishonesty, injustice, cruelty, and all other vices came into the human world via the first sin and human beings are not capable of overcoming that profound corruption on their own or in worldly life. Redemption, and a re-turning to God, is possible but only with external, graciously given aid. God is the source of all that is good, including that aid, and to the extent that human beings are capable of realizing good, it is through being receptive and responsive to God. Aquinas spoke for Christian thought in saying, "For in all things, good comes from one perfect cause."² Responding to God's guidance and grace makes it possible to once again be close to God and in that sense, even the notion of a human *telos*, a perfective end to be actualized, is understood in terms of the significance of origins, a restoration of undamaged integrity.

Because of fallenness human beings are not to be entrusted with the project of fashioning a conception of political order except through the guidance supplied by custom or natural law. Even when political theorizing highlighted the importance of rule being for the sake of the common good, and law serving the ends of the community, these notions were often cast in terms of ruling and law being modes of stewardship of certain aspects of the created order, a normatively organized hierarchy including human beings at a fixed position in it, and having certain ends proper to their nature as human beings.

Some thinkers argued that the fact that there is a need for government at all is because of the fall, and the same is true of private property. Some held that in the original condition of innocence, all property was common and there was no slavery. In humanity's fallen condition various institutions and practices are sanctioned so that important needs can be met. These are responses to predicaments that simply would not have arisen in the state of innocence. Some maintained that natural law provided a set of principles and rules for sinful man, no longer in an innocent state. Others held that natural law is the same prior to the fall and after it. Sir John Fortescue wrote:

Yet the status of man was changed by sin, but not the law of nature, of which also the Civil Laws say that natural rights which are preserved among all peoples everywhere, constituted by a certain divine providence, remain always firm and immutable . . . Even so the equity of natural justice which once assigned to innocent man the common ownership of all things is none other than that equity which now, because of his sin, takes away from man corrupted by guilt the good of common ownership.³

Aquinas held that natural law applied to man only after the fall and thus, the norms of natural law applied immutably, not needing to be adjusted, as it were, for the difference made by the fall. Fallenness also had a bearing on the question of slavery. Aquinas argued that in the state of innocence "no man was lord of another" if by "lordship" we mean that the person subject to lordship is the

slave of the other. There is also the sense in which “one dominates another as a free man when he directs him to the proper good of him who is directed, or to the common good” and “this kind of lordship of man over man would have existed in the state of innocence.”⁴ This is because man is naturally a social animal and because it is right that he who has greater knowledge and virtue should direct the other for the sake of the good of the person directed. Aquinas quotes I Peter 4:10 and Augustine, who in the *City of God* (Book XIX, chs. 14, 15) argued that one rules another “by the just rule, not by cupidity of dominating, but by the office of counseling: this natural order prescribes; thus God established man.”⁵ Rufinus wrote:

The dignity of man before sin was lofty, hanging as if on cords on these two qualities: namely, rectitude of justice and clarity of knowledge; through the one he controlled human affairs, through the other he approached divine matters. However, as the wickedness of the devil grew within him, the rectitude of justice was depressed by the weight of perverse malice and by the mist of error the light of knowledge was made dim.⁶

Men managed to find a way to live together, to “submit to the bonds of concord, and to make fixed contracts; and these are called the laws of peoples, because nearly all peoples use them: for instance, sales, leases, barter, and the like.”⁷ But God “sent His Son, through Whom He established for us the law of life, the law immaculate, converting souls, to which we give that happy name, the Gospel.”⁸ What potential for virtue remained in man after the fall enabled him to live by law but God’s grace was necessary for bringing man to perfection. Teleological conceptions, oriented to the actualization of the perfections proper to a thing’s nature, were joined to Christian theology’s notion that humanity’s condition in history is a fallen one, yielding important results for politics.

There were multiple sources of medieval law and authority and these were not integrated in a stable, systematic arrangement, universally acknowledged as legitimate. Custom was woven through some of these views in complex ways. There was feudal law, with its own considerable complexity, Roman law, canon law, and numerous theories of natural law and notions of the law of peoples. In modern politics we might be disposed to distinguish between custom and the law, thinking of the latter in positive, explicit, legislative terms (unless we have natural law in mind but that, too, includes specific principles or norms). Custom, we might think, is *other* than law, the latter involving a kind of rational design or intention that the former typically lacks. (Though, of course, there is a significant tradition of common law that has developed in ways that differ from medieval customary law.) Yet, until the latter portion of the Middle Ages the notion that custom is an authoritative anchor for law was widely held, and finding a basis for a rule or policy in custom was regarded as a way of showing its legitimacy.

This changed over time, with an increased scholarly interest in Roman law, the explicit elaboration of several conceptions of natural law, complex debates over the nature and control of property, and disputes concerning the relations between temporal authority and church authority. All of those factors contributed to the development of theories of law that relied less on custom as the basis of normative authority.

Rights, Property, and Obligation

Medieval political thought did not include the notion of the individual in a pre-political condition, consenting to enter into a political order, the consent being an expression of the person’s rational judgment and volition. That basis of political legitimacy and political obligation came later. Even though political legitimacy was not explained in terms of a mandate of democratic sovereignty the notion that the power of the ruler is to serve the common good or that it is ultimately an expression of the legislation grounded in the will of the community, was commonly held. The

king was to rule justly and to preserve peaceful order; he was to serve the good of the community. Again, Aquinas expresses a common notion; “it pertains to the duty of the king to promote the good life of the multitude in line with reason.”⁹ There was not yet an explicit doctrine of natural rights, though the king could be deposed for failure to fulfill the responsibilities of the office. Notions of absolute power and rule by divine right would come later. The notion of serving the good of the community was not yet connected with a formal notion of *the state*, with formally organized institutions of governance. Instead, the governance occurred through the complex obligations and expectations accompanying various feudal statuses in the community. The king was the lord at the peak of a complex pyramid of feudal relations. The notion of a state with enduring, dedicated institutions of administration developed slowly, in conjunction with the developments of estates as recognizable corporate bodies, members of which had a collaborative conception of their interests, frequently asserted against the king in regard to taxation.

Though during much of the Middle Ages it was understood that the king is God’s minister, that did *not* mean that the king had unconditional authority or power. Henry of Bracton writes:

The king’s power is of right and not of unright . . . Therefore, the king ought to exercise the power of right as God’s vicar and minister on earth, because that power is from God above; but the power of unright is from the devil and not from God, and the king will be the minister of that one of the two whose works he does.¹⁰

Again:

For king is not the name of a nature, but of an office, like bishop, priest, deacon. And when any man for certain causes is deposed from the office entrusted to him, he is not what he was, nor should the honour due to the office be afterwards paid him.¹¹

The question of whether the kingly office was higher than the priestly office was, of course, to become one of the central controversies of medieval politics, reflected in theorizing and in actual events and sometimes in violent struggles for power.

Though the medievals did not have a conception of individual rights and liberties similar to modern conceptions this is not to say that the medievals had no notion of a person’s rights; indeed, one could have many well-defined, status-based rights. But rights were typically a matter of status, of one’s place in a hierarchy that was regarded as a natural order, and one’s place in that order was not a voluntary matter. A great deal of modern political thought has been influenced by Hobbes’s claim that all persons have the same natural liberties and his insight that the state is an artifact with its origin in human intention and decision, rather than political life being natural and its form answering to fixed (if customary) principles and values. Hobbes’s willingness to accommodate absolutism and his exclusion of the sovereign from the social contract distance him from much of the political thought that developed after, and in response to, his own thought. However, the significance of rational endorsement of the principles of the political order, and the consensual contractarian enactment (by individuals with equal rights) of that endorsement owe much to Hobbes, even if they are now employed to obtain very unHobbesian results.

Notions of the common good or the good of the community figured prominently and there was widespread acceptance of the notion that custom expressed the people’s legislative will yet, this was not part of a doctrine of popular sovereignty in the liberal-democratic sense. Nor was there a counterpart to the kind of representation that is a regular feature of modern liberal democratic government. In the Middle Ages it could be said that the ends of common people were served by those above them in the feudal order, for they were to act with a view to the good of all. But they were not accountable representatives selected by and answerable to those whose ends

they serve. Moreover, those higher up in the hierarchy had their own ends on account of their own place in the social order. The good of the community was a complex, its components differentiated on the basis of the complexity of the social world.

Notions of the intrinsic worth of each individual human being, and the significance of each human soul and the equality of those souls owe much to Judaism and Christianity. However, the church was not a self-conscious, energetic exponent of *political* equality and the rights of the individual.

The early church had made peace with Roman absolutism and with the great inequalities and injustices of Roman society; it was prepared to accept the stratification of the feudal age and the irresponsibility of medieval kings. For Christ's kingdom was not of this world.¹²

The notion of a harmoniously integrated normative hierarchy suited the church both in regard to metaphysics and in regard to social order. A great deal of medieval Christian philosophy up to the thirteenth century was one or another variant of Christianized Neoplatonism, though Plato's *Republic* and *Laws* were not translated into Latin until later. Neoplatonism's conception of the world as involving a fixed order of beings at multiple levels of perfection was integrated with Christian theology but not all of the necessitarian metaphysics of Neoplatonism could be included. The notion that beings at different levels in the ordered hierarchy processed from the One, the highest being, by a necessity logical in its rigidity conflicted with the doctrine of God's free act of creation of the world. But other elements of the Neoplatonic conception—with appropriate revision—could be accepted. The view that justice involved persons fulfilling the duties of their stations, without egalitarian principles to challenge the conception of what those were, suited the church.

While there was a sense in which each human soul was equally precious and in its spiritual mission the church could be said to value all souls equally, with regard to humans as natural beings there was little impetus for a principle of equality. The church accepted the high degree of economic inequality and the inability of those at the lower reaches of the social hierarchy to ever have any realistic ambition of elevating themselves. Inequality was accepted within the context of the view that property and wealth were in the service of the welfare of the community overall and the stratification of society was almost universally accepted as a natural order.

Notions of equal standing, universal rights and liberties, and of bargaining and compromise as unavoidable elements of politics— notions integral to a great deal of modern political culture—were basically unknown to the medievals. As suggested above, the notion that progress, development, aspiration, and the more or less remaking of the world in accord with a vision of what politics could accomplish did not figure centrally in medieval politics. Even when groups argued for some revision in powers or authority, often, the case was made on the basis of asserting customary rights and powers, on the basis of the discovery of what was already properly inherent in the political order instead of on the basis of novel ideas, progress, and change. Plus, thinkers influenced by Augustinian skepticism regarding the prospects and virtues of the earthly City would have had little optimism about what human beings can accomplish by way of striving to perfect themselves through their own unaided efforts.

It is important also that the many distinctions of jurisdiction and authority did not bear a likeness to conceptions of constitutionally defined separations of power. Much modern political thought concerns the question of the locus of sovereignty and the accountability of political institutions and agents and articulation of the conception of popular sovereignty. Many medievals did not conceptualize distinct modes of political powers, such as legislative power, judicial, and executive power. These tended to be combined in something like an overall notion of jurisdiction and administration. If those powers were institutionally separated, ruling would lack integrity and unity. Aquinas wrote, "The good and welfare of an associated multitude is the preservation of its

unity, which is called peace, without which the utility of social life is destroyed—nay more, the discordant multitude becomes a burden to itself.”¹³ Many medievals believed strongly in the unity of rule but not for Hobbesian reasons concerning the dangers of divided sovereignty, the resulting confusion over where authority is located, and the precariousness of life in such a condition. Instead, they were accustomed to a plurality of authorities but it also seemed nearly axiomatic to them that, for any given locus of authority, there should be unity of rule “at the top.” A separation of powers was just not part of their conceptual idiom. Marsiglio of Padua argued that if there was a plurality of ruling bodies “there would occur the division and opposition, fighting and separation, of citizens and ultimately the dissolution of the city . . . conflict would occur between the ruling bodies themselves.”¹⁴

Unity of rule at the top was compatible with there being a role for discretion but it was discretion understood as tightly connected with the ends proper to rule. The ends and obligations of rule were defined independently of the will or personal aims of the ruler. Governing’s agenda included the preservation of peace and the administration of justice with persons fulfilling the responsibilities of their roles in a fitting manner. It did not include significant discretionary ends of this or that ruler or regime. The medievals did not think of political matters in terms of *interests*, but rather, in terms of *ends*.

With the passage of time the guidance of custom became increasingly inadequate and more fully elaborated theories of just order and political power were needed. Resources were borrowed from Roman law and from Aristotle’s political thought in developing those elaborations. In that sense, medieval political thought used conceptual tools borrowed from the past to address contemporary problems but that use of the past differed from the reliance on custom. The powers of the king and the institutions of political order came to be theorized about in steadily more intellectually self-conscious and explicit terms.

Property had a central place in medieval thought concerning both social order and political order. The development of feudalism made it possible to interpret a kingdom as the property of the monarch but this was part of a much more complex conception of property. Private property was widely considered as having the sanction of natural law and utility. However, the question of the origin and sanction of private property was disputed and some defenders of the church’s lordship over property were anxious to make the case for papal supremacy over that of any individual, even the king. Some defenders of papal *plenitudo potestatis* maintained that not only did the pope have a monopoly of power in the church but that he also had power over temporal affairs. Giles of Rome said of the pope that, “the power of all agents is contained in him, so that in him is all the power of all the agents in the church; and therefore it is said that in him there is a plenitude of power.”¹⁵ John of Turrecremata held a similar view, claiming that, “the plenitude of power cannot exist subjectively and formally in the corporation of the church, but only in the Roman pontiff.”¹⁶

In the latter centuries of the Middle Ages Ockham and others (e.g. Marsiglio of Padua) argued against the church’s claims to superior lordship over property, and part of their argument was that the church’s primary mission is spiritual and not the promotion of social utility. Marsiglio wrote that, “no Roman bishop or other bishop, priest or any other spiritual minister as such is suited to the office of coercive rulership over any individual person regardless of condition or any community or association whatsoever.”¹⁷ Advocates of the church’s view answered that all lordship ultimately has a divine origin and that the approval of the church is needed to support *any* valid title to property because one’s relation to God is the proper ground of any claim to lordship and the church is the judge of that relation. Claims regarding property were related closely to claims regarding political authority overall, the disputes about each entangled with disputes about the other.

Some theorists held that property had originally been in common and that it was only in the sinful condition that private property is justified, as meeting the needs of fallen humankind.

Numerous churchmen argued that the world was given man in common but “the fact of sin necessitated the establishment of private property to check man’s avarice and to secure such order as might be.”¹⁸ Alexander of Hales held that, “it is good that some things be private; for otherwise good men would be in want and human society would not endure, because the wicked would seize everything.”¹⁹ At the same time, Christian charity meant that the fruits of the earth were to serve the needs of all, and the fact of ownership, even if it included sole ownership with the right to dispose of the land as one wished, did not take precedence over the requirement of benevolence. Aquinas, for instance,

distinguished between property as the right to acquire and administer and property as the right to use for one’s own advantage. In the former sense, private property had the natural sanction of social utility; but as a right of use it remained subordinate to and restricted by the principle that material things were created by God for the common good of men.²⁰

Aquinas argued that the right to private property was based upon the norms of natural law, and was explained by private property’s utility to human ends overall. To many medieval thinkers,

private property appeared as blessed by reason and more or less directly by natural law. It was most often classified as an institution of the *jus gentium*, with the implication that, while its human origin was a matter of agreement, that agreement reflected a universal need. Moreover, as an institution of the law of peoples, property appeared as coordinate in origin and dignity with rulership, and this construction provided a basis for the protection of property from the arbitrary intervention of the king, even while it left the way open for the subjection of property to his control in other ways.²¹

Property was understood in such a way that several different persons could have rights to a given property and for persons of a certain status those rights could extend to inheritance. There could be several contractual relations filling the “space” between the lord who owned the land and the persons who actually worked it. Multiple levels of subinfeudation were common, with various contractual relationships as links in the chain connecting the lord with the person growing crops or keeping animals. The vassal to a feudal lord typically did not have the right to sell the land and landed property was not regarded as something to be bought and sold in a money-economy. When the vassal died it was likely that the land would pass to the vassal’s heir, who, as such, had certain contractual obligations to the lord. Other persons might contractually come to have certain rights in the land, the chain of contractual relations anchored in the lord who provided protection and the vassal owing payment or other duties to the lord. “The sale of land thus burdened was, in the earlier feudal period, virtually impossible; but the vassal might by subinfeudation with the lord’s consent grant the land to a third holder on similar terms.”²²

The political dimension of this conception of property was that the king could regard the land he ruled as his property but there could be numerous legally enforceable rights-claims to a single piece of land. The king could not simply claim that his office trumped all those rights claims. In consequence, a king’s claim that the kingdom and all the property to which others had rights belonged to him would have been recognized “only in the sense that they are subjects to his protection and jurisdiction.”²³ Moreover, there was a long history of thinking of kingship as a public office, and as noted above, while the people did not make law, it was widely held that the law—though enacted by the king—was an expression of the customary law of the people.

Indeed, the promulgation of fundamental law in the Middle Ages was more like an act of jurisdiction (*juris dictio*) than an act of legislation. The king with his council or the king with his

parliament declared the law as a court declares it, except that it was declared in general terms rather than applied to the settlement of a particular dispute. The authority given to custom by such formal declaration was parallel in its significance to the authority which, according to Beaumanoir, a custom received through its “proving” in a successful lawsuit.²⁴

Property was not bought and sold as in later eras. The king, responsible for the security of the realm, might make claims on property (through taxation) on the basis of exigencies of security. However, the king’s claim on property was vulnerable to interpretation as despotism and the complexity of rights in property was often a barrier against the king simply making successful claims on property. In, say, the twelfth or thirteenth century a king’s advisors might have assured him that, at his discretion, he could levy taxes for the sake of paying for military forces needed to secure the safety of the kingdom. However, feudal barons might have balked at this, claiming that their property rights, supported by considerations of *jus gentium*, took priority over the king’s claim. (Consider, for example, the barons’ claims that led to King John accepting Magna Carta in 1215.).

Contests of Power

Once Aristotle’s philosophy was retrieved on a large scale, elements of it were combined with Stoic-informed natural law thinking and patristic thought in ways that marked significant developments. The integration of Aristotle’s thought required some modification. Aristotle’s focus was the city-state, and much medieval thought was concerned with monarchy and empire. Also, the Christian concern with blessedness and the universal relevance and authority of the church had no counterpart in Aristotle’s thought. For the medievals, there was a combination of universality and transcendence that is just not part of Aristotle’s conceptual idiom. The feudal order was not part of Aristotle’s conception of the social world and political life but it was possible to combine feudal custom with elements of that conception by seeing feudal order as an articulation of integrated, end-oriented organization.

By the thirteenth century several different lines of thought were converging in new ways. One important development of the period was a transition from feudal hierarchy as the most basic and significant mode of social (and economic) arrangement to more corporatist forms. To be sure, hierarchy remained very important but corporate forms of social and economic organization were responding to changing circumstances and were also bringing about changes. Corporate forms, whether of a guild, town, university, or some other group or association typically involved persons in at least some community of interest and in deliberations and decisions about the pursuit of those interests. That included electing officers and introducing governance structures quite different from feudal structures, both formally and in regard to their purposes.

An individual could feel that he was a valued member of a group with shared interests and this was a new way to give voice to one’s interests (within certain contexts and departments of activity). The corporation was also potentially immortal; it could outlive any particular group of individual members. This, in turn, required new kinds of legal thinking.

The tendency of feudalism was, in fact, to reduce all social and political organization to a network of contractual bonds between pairs of individuals, to assimilate public power to private property, to regard the ruler as part of this contractual system, and to limit the role of government to the minimum which was compatible with the unimpaired maintenance of feudal property rights.²⁵

During the height of feudalism it was sometimes not even clear what precisely counted as a monarch’s kingdom. States did not have well-defined borders and while allegiance was certainly

important the medievals did not have a notion of citizenship recognizably similar to modern notions. For one thing, persons were subjects, not citizens. Also:

Even bodies that might have been construed as acting for the community through delegated power—for instance, the king's great council, or the electors of the Holy Roman Empire—tended also to appear as groups of private individuals whose right to advise, to decide, to elect was attached to each one as an incident of his individual status rather than to the whole group as a corporate body representing a larger corporation. From this conception followed the typical requirement of unanimity for the decisions of such groups.²⁶

The development of corporate bodies, with fairly clear notions of aims, purposes, and interests, and with organized, enduring governance began to alter the political landscape, making for an important change from the terms of the feudal order.

The investiture struggle gave rise to considerable debate and theorizing regarding the origin and scope of political authority and it brought into relief the question of the relations between temporal and spiritual power. The state (and its organs) was not the conceptual center of gravity that it came to be in early modern thought. Medieval thought concerning both the church and temporal political power tended to focus on the proper ends of the church or the king rather than on structures of political authority. Granted, one can point to the debates about the powers of church councils *vis a vis* papal power as an important exception to that general rule.²⁷ However, even in that case, much of what was at issue concerned how best to enact or actualize the powers of the church, given that its primary end is to aid human beings in attaining blessedness. The medievals were primarily concerned with right ends in a way that rendered organizational questions secondary. They tended to avoid the separation of powers. Administration, jurisdiction, and discretion belonged together, the substance of each being determined by the office in question and its place in the normative order. A separation of powers would have been regarded as a dangerous disintegration of the capacity to govern.

It is unsurprising that there should have been centuries of debate over the scope of authority of pope and king (or emperor, as the Holy Roman Empire took on a more coherent, lasting shape, with the emperors having a self-conscious awareness of the significance of the office). Moreover, there were complex debates within the church over the powers of the pope and church councils. Conciliarists argued that while the pope indeed had a unique position of leadership of the church, the councils were the voice of the whole church, and represented the church as a whole. They rejected the view that the pope had exclusive, sole powers of governance of the church. This was analogous in some respects to debates over the character of kingly rule and the appropriate role of the barons or other lords. True, they were vassals to the king but the king was the servant of the realm, with special responsibilities for peace and order. His ability to serve those ends well depended upon the unity of his rule well-serving those for whose good he was responsible.

There had been considerable controversy over investiture, over the issue of whether the pope or the king invested a bishop with his authority. On the one side was the papal claim to have responsibility for, and thus, authority over, all of Christendom. On the other side was the secularist claim that the appointment of bishops and abbots was properly the responsibility of the secular ruler, because the papal authority concerned spiritual matters and the investiture of a bishop or an abbot concerned the appointment to an office with administrative responsibilities in a specific part of a kingdom. To be sure, less than principled considerations often figured in various parties taking one or another side in these disputes. However, the investiture controversy was a crucial context for motivating the formulation of sophisticated arguments concerning papal and temporal power. In view of the fact that (i) there was not yet a well-defined conception of the state and its powers, and that (ii) the pope's office was spiritual and had jurisdiction of a sort over all of Christendom,

and that (iii) the king had responsibility for the public good, that (iv) significant lands and their wealth were at stake, and that (v) there was not yet an agreed, satisfactorily elaborated account of just where the lines were to be drawn between ecclesiastical and temporal powers and obligations, it is not difficult to understand why the issues motivated a great many arguments, objections, and replies.

Among the factors influencing the development of the arguments was the growth of better-organized state institutions, making it possible for the monarch to rule more effectively and to regularize state functions, strengthening the king's hand in pushing back against papal claims of authority and power. In addition, there was sufficient corruption in the church to motivate programs of reform, some of which included arguments for minimizing the church's role in worldly affairs and focusing upon and purifying its spiritual functions. William of Ockham is an important figure in that regard. Also, Marsiglio of Padua formulated an ambitious case for limiting papal rule over worldly affairs, and Dante, in *De Monarchia*, argued for the unity of rule over a restored empire, the chief aim of which was to preserve peace so that human beings need not be distracted from their proper intellectual perfectionist end. These three were among the most robust critics of papal claims to authority over temporal affairs.

Above, we noted Marsiglio's position on the importance of unified rule. He was equally direct in his objections to papal claims to assert authority over any but spiritual matters. He wrote of bishops' attempts to rule over feudal rights and temporal goods:

And so such an incorrect judgment about, and perhaps perverted desire for, rulership on the part of certain Roman bishops, which they assert is due to them on the basis of a plenitude of power passed on to them (as they say) by Christ, constitutes that singular cause which we have described as the efficient cause of the intranquility or discord of the city or kingdom.²⁸

At the same time, Aristotle's *Politics* provided conceptual resources for giving more determinate form to medieval political thought. Aristotle's taxonomy of different forms of rule and the respects in which they are susceptible to certain kinds of corruption and dissolution enlarged the medieval political vocabulary. The rediscovery came at a time when political entities had structure and senses of identity that had developed beyond the basic contours of feudal structure. In addition, the estates, which would come to be so important to European political history for the next several centuries, were taking shape and beginning to have their own senses of identity *vis a vis* kings and princes.

By the fourteenth century the state was developing with elements of institutional structure making it possible to mount significant arguments against papal power. The state could plausibly claim to have justice and peace as its primary functions, pushing back against church involvement in temporal affairs. Dante argued that the authority of the state came directly from God, unmediated by the church. "Thus, therefore, it appears that the authority of temporal monarchy flows into it directly, without any intermediary, from the fountain of universal authority."²⁹ With his accustomed subtlety Aquinas made some clarifying distinctions yet still left important ambiguities in his view overall. He wrote:

It seems that the ultimate end of an associated multitude is to live according to virtue; for this is the purpose for which men congregate: that they may live well together, an end whose attainment would not be possible to anyone who lived alone; now the good life is life according to virtue; therefore, a virtuous life is the end of human congregation.³⁰

But because man, in living according to virtue, is ordained to an ulterior end, which consists in the enjoyment of God, as we said above, there must be the same end for the human multitude as there is of one man.³¹

But because man does not attain the end of the enjoyment of God through human virtue but by divine virtue . . . therefore to guide men to that end will not belong to human government but to divine . . . the ministry of that government was not committed to earthly kings but to priests, and especially to the highest priest, the successor of Peter, the Roman Pontiff . . . For thus those to whom belongs the care of antecedent ends ought to be subject to him to whom the care of the ultimate end belongs, and to be directed by his command.³²

Aquinas also held that both spiritual and secular power are derived from God and that

in those things that pertain to civil good, the secular power is to be obeyed rather than the spiritual, according to the saying in Matthew 22:[21], "Render to Caesar the things that are Caesar's."

Unless, perhaps, the secular power is joined to the spiritual, as in the pope, who holds the apex of both authorities, the spiritual and the secular.³³

Not long after, Nicholas of Cusa was writing of politics in a very different, more modern-sounding tone.

Whence, since by nature all are free, every government—whether it consists in written law or in a living law in the prince—through which the subjects are coerced from evil deeds and their liberty is regulated to good by fear of punishment is based on agreement alone and the consent of the subjects.

Now, since by a general compact human society has agreed to obey its kings, it follows that in a true order of government there should be an election to choose the ruler himself, through which election his is constituted rule and judge of those who elect him; thus ordained and righteous lordships and presidencies are constituted through election.³⁴

This passage is indicative of the growing significance of consent with respect to political legitimacy and political obligation. By the fourteenth and fifteenth centuries the longstanding notion of the will of the people as an anchor of the rule of law was being more explicitly developed into the notion of consent. At the same time, the increasing economic power and organization of guilds, universities, and other corporate bodies meant that there were important, politically interested groups and institutions insisting that rulers be responsive to them.

However, even when medieval thinkers emphasized the importance of consent and the liberty of the individual they were not thinking in terms of Hobbesian or Lockean liberty. They were remote from Hobbes because the medievals generally presupposed that there is an objectively good end for a human being and the realization of that end—which was not interpreted in terms of the individual's desires or a subjective notion of interests—was the *telos* of government. They were remote from Locke because even though medieval thought reflected concern for the individual, this was in terms of each person's supernatural end of closeness to God, rather than a concern with the individual as a participant in the construction of a legitimate political order. When medieval thinkers highlighted consent they tended to think of it in terms of the judgment of the wise, in terms of good judgment about human good, rather than in terms of majority rule.

As noted above, corporate bodies increasingly took shape and had a growing importance in the economic and political life of the Middle Ages. Still, the medieval mindset largely maintained the notion that unity is crucial to rule, to order, and to peace and thus, the importance of the individual to political anthropology (and metaphysics) was not interpreted in terms of having a voice

or a role in governance. The thinking was still largely committed to a conception of hierarchy, harmony, and subordination of the individual to the welfare of the community. The ruling part of the community was to serve the good of the individuals constituting it but that ruling part represented the members of the community without being democratically accountable to them. As Lewis points out, in northern Europe “the idea of the popular origin of law was not originally coupled with a concept of continuing popular legislation.”³⁵ Bracton wrote:

Moreover, the king was created and chosen for this: that he should make justice for all, and that in him the Lord should sit, and that he himself should decide his judgments, and that he should sustain and defend what he has justly judged, because if there were no one to make justice peace could easily be wiped out, and it would be vain to establish laws and to do justice if there were no one to protect the laws.³⁶

The king depended upon others for financial and military resources and the barons and other important groups could claim that they represented the will or at least the support of the people in a manner essential to the king's exercise of power not being despotic. In this way, more scope for consent was emerging despite the fact that it was not comparable to modern democratic consent.

In the ecclesiastical context conciliarists maintained that the papal office was not, in fact, higher than the other offices of the church. The pope had certain specific responsibilities that exceeded those of other officers of the church but his was not an office different in kind. Accordingly, conciliarists argued that the councils were the seat of authority in the church and the pope was to be responsive both to the law as laid down by the councils and to the councils as a form of representative authority. Thus, while the pope had considerable discretionary power, that power was not to be exercised in a way that was independent of the authority of the church overall, as a community, represented by the councils.

In both contexts the unity of rule was highly significant. The “Babylonian Captivity” and the Western Schism made the importance of unity even more evident and the Council of Constance, settling the issue of papal succession, marked a decline in papal power over temporal affairs but, at the same time, strengthened the authority of the pope in the church. Lewis notes that:

The essence of the conciliarist argument was a kind of pluralism, an implicit denial that the good government of the church required that authority must necessarily always come to a head at the same point. Their pluralism was peculiarly precarious because of their inability to formulate it in a clear-cut separation of powers theory.³⁷

Here, again, as in the context of temporal rule, the absence of a conception of separation of powers led to a result in which the ruler “at the top” was able to assert distinctive, independent authority because the strategies for checking it invited division in ways that would render rule ineffective. The legal idiom of the era did not make possible articulation of distinct powers in a manner that was not susceptible to disintegration.

Marsiglio argued that the pope does not even have spiritual powers above and beyond those possessed by other priests, and he argued that temporal rulers should have the authority to fill numerous ecclesiastical positions. He held that

no bishop or church, as such, is head or principal of the others by virtue of the words of Scripture. For, in the absolute sense, the head of the church and the foundation of the faith is, by the immediate ordinance of God, according to Scripture or truth, only Christ Himself, not any apostle, bishop, or priest.³⁸

And:

It belongs only to the human legislator, or to the multitude of Christians of the place over which the minister is to be established, to elect, determine, and present persons to be promoted to ecclesiastical orders; and that no priest or bishop singly, nor any single college thereof, is permitted to confer such orders without the permission of the human legislator or of the ruler who bears its authority.³⁹

William of Ockham argued that,

the papal principate does not regularly include the power to abolish or disturb the rights and liberties of others, especially those of emperors, kings, princes, and other laymen, since rights and liberties of this sort are in most cases reckoned among secular matters, to which the papal principate, as we have shown, by no means regularly extends.⁴⁰

Ockham held that the position of the pope is not “dominative or despotic but ministerial, so that the powers that it has by Christ’s ordination extend only to those things that are necessary to the salvation of the believers.”⁴¹

Ockham also held that a council of the church may be convened even without the authority of the pope. He presented several arguments for the view, including the argument that it is appropriate to so convene to judge whether a pope is a heretic and also to elect a pope if the papacy is vacant. The view is significant as an expression of the perspective that the authority of the pontiff does not exceed that of the community of the church, the universal body of believers. We have seen this notion of authority residing in the community, though not on the basis of any explicit constitution, in the context of temporal power, as well.

Defenders of a papal monopoly of power, such as John of Turrecremata, fought back against the conciliarists. He comes late in the medieval era, writing in the first few decades of the fifteenth century. An able polemicist, he formulated a systematic critique of some of some of the conciliarist positions in *Summa contra Ecclesie et Primatus Apostoli Petri Adversarios*. He maintained that “in the Roman pontiff alone resides the plenitude of the power of the church,”⁴² and this is so for several reasons. One is that, “it is impossible that the spiritual power by which one is bound or loosed in the soul in regard to heaven should be derived immediately from the person or persons who are bound or loosed by that same power.”⁴³ A second reason is that,

if the power of the keys of jurisdiction was given to the universal church in common as a corporation, it would follow that neither pope nor prelates of the church could carry out or exercise that power unless all the faithful, both laymen and clerics, had been at least convoked.⁴⁴

This is not the procedure followed by the church and it is not wrong that it is not followed. It is absurd to suppose that a majority of laymen or priests and clerics “would have the power of making decisions in the name of the whole church.”⁴⁵

Before John of Turrecremata, Giles of Rome was another defender of the plenitude of papal power, developing a conception of the relation between nature and grace in which the church represented a perfection of the community exceeding the perfection that could be achieved by the state. But, in his view, not only is the church higher than the state (though not historically prior) but, the pope had temporal as well as spiritual power. Giles was influenced by the Augustinian conception of man’s fallen condition as so corrupted by sin that the process of salvation was not possible unless all valid political authority was subject to the pope. The pope was understood to have the highest office regarding the good of the community and that was conjoined to the claim

that the pope's power lacked nothing required for the government of the church. In the view of some theorists, this essentially meant that the pope's will was law, even to the extent of interpreting natural law.

By the latter years of the Middle Ages both the state and the papacy had reached a point where theories of very extensive powers—absolute or near-absolute power—had been elaborated for each. While the controversies surrounding investiture and the complications of a simultaneous plurality of popes had been largely resolved, the grounds were being laid for new contests concerning state and church power. These new contests arose within each sphere, as the recently articulated powers of each type of rule were about to be challenged. In the sphere of temporal power the challenge would come from corporate bodies asserting their interests and claims to authority against the crown. The English Civil War in the mid-seventeenth century was a kind of culmination of that process in Britain. More generally, in the spiritual sphere the challenge was motivated by, and directed at, what was perceived as institutional corruption of a kind that could only be remedied by a reconstruction of priesthood—by reformation, and not by a restoration of conciliar power. The perceived autocracy of the pope was a crucial issue but it was also emblematic of what some saw as very objectionable practices of the church, its hierarchical structure, and its sacerdotal function overall. Critics of the papacy and the church had opened lines of reasoning that were to lead to the Reformation.

Conclusion

The Middle Ages produced a great deal of complex thought concerning authority, legitimacy, law, and the powers of both temporal and spiritual government. Some of the issues that exercised medieval thinkers were historical particularities of that age. They involved the intersection and integration of Roman law, Germanic custom, canon law, natural law, and relations between prince and pope. Also, the prevalence of Neoplatonic metaphysics and, in the later Middle Ages, Aristotelian philosophy gave a distinctive character to a great deal of medieval thought. Later thought had different contours. Nevertheless, it would be a mistake to regard medieval thought as relevant only to scholars of the history of that period. Medieval thinkers developed the conceptual idiom needed to formulate and address many of the issues that would come to be fundamental to early modern theorizing about the state, natural law, property, and political legitimacy.

The understanding of the political status of the individual is, by now, much changed, as is the conception of a person's rights. Also, the understanding of the chief responsibilities of political offices and the persons occupying political offices has changed significantly. The political culture of liberal democracies, with an emphasis on progress, change, and highly activist state-policy is alien to the medieval mind, with its understanding of politics anchored in the notion of fallenness and the modest capacity of human beings to be causes of their own perfection. In that regard there is a kind of humility in medieval political thought. While that may appear to the modern mind as an impediment to progress it was anchored in a kind of modesty about the human capacity to govern without excesses of corruption.

A great deal of medieval political history is a story of contests between values anchored in temporal goods and values anchored in spiritual goods. The study of medieval political thought is a study of rival attempts to articulate, distinguish, and integrate multiple values, and the relations and the conflicts between different values remain at the core of political thought. The medievals were impressively aware of the character and significance of fundamental questions concerning the relations between multiple values and how they figure in the institutions and practices shaping human communities. Despite how different our political preoccupations and aspirations are from theirs, their grasp of some of the most basic conceptual architecture of politics—the problem of how a pluralism of values is to be reflected in and realized by political institutions and activities—remains both fascinating and instructive.

Further Reading

Medieval philosophy in general has benefited from the growing interest in the history of philosophy in general in recent decades. This includes an interest in Jewish and Islamic thinkers as well as Christian thinkers, both in regard to the publication of their works and in regard to a rapidly growing secondary literature. Medieval metaphysics, logic, and philosophy of language have long been areas of specialist study, and of course, the medievals are centrally important figures in philosophical theology. They also wrote important works on moral psychology and ethics. Law and government are not among the more intensively studied departments of medieval thought.

One fairly obvious explanation of the neglect of medieval political thought is the fact that so much recent and contemporary thought is preoccupied with theories of the liberal polity, liberal democracy, social democracy, value pluralism, and associated issues. To the extent that religiously grounded considerations are discussed, it is often in terms of how they should be excluded from political discourse on the grounds of failing to satisfy a standard of “public reason.” The very considerable body of medieval thought concerning law, authority, jurisdiction, legitimacy, and other topics has received relatively little attention.

However, there are some excellent works dedicated to medieval political ideas. Some are collections of primary sources, some are scholarship on medieval thought, and some include works of both types. A two-volume work, Lewis (1954), is a collection of excerpts from many medieval thinkers, and also includes substantial essays by the editor and an extensive bibliographical note organized in several helpful sections (individual authors, general surveys, chronological listings collections of documents, etc.). A smaller but also excellent work is Nederman and Langdon Forhan (1993). These works include excerpts from several figures (such as Bernard of Clairvaux, Giles of Rome, Brunetto Latini, John of Paris) as well as “the usual suspects” (e.g., Aquinas, Marsiglio, John of Salisbury). In Nederman and Langdon Forhan (1993), there are brief introductions by the editors and the book includes many suggestions for further reading, both primary and secondary sources. Lerner and Mahdi (1972) includes lengthy excerpts from Jewish, Muslim, and Christian thinkers. Many of the excerpts include topics other than politics but that provide helpful philosophical context and show connections between political thought and other areas of philosophical theorizing. Parens and Macfarland (2011) is a more recently published work, also including excerpts from thinkers in all three religious traditions. Among secondary sources, Burns (1991) is an excellent resource.

In various general anthologies of medieval philosophy one can find excerpts of works on politics. For example Hyman and Walsh (1983) includes excerpts from thinkers in each of the three Abrahamic traditions, and some of the excerpts include portions on law and politics. Several of the volumes in the *Cambridge Companion* series (e.g., *Cambridge Companion to Aquinas*, *Cambridge Companion to Maimonides*, etc.) include chapters on law or politics.

Notes

- 1 Lewis (1954: 7).
- 2 Thomas Aquinas, excerpt from *On Kingship*, Book I, ch. 3, in Nederman and Langdon Forhan (1993: 104).
- 3 Sir John Fortescu, excerpt from *De Natura Legis Naturae*, Part I, ch. XX, in Lewis (1954: 134).
- 4 Thomas Aquinas, excerpt from *Summa Theologiae*, I, q. 96, Art 4, in Lewis (1954: 174).
- 5 Ibid.: 175.
- 6 Rufinus, excerpt from *Preface of Summa Decretorum* in ibid.: 37.
- 7 Ibid.: 37.
- 8 Ibid.: 37.
- 9 Aquinas, excerpt from *On Kingship*, Book I, ch. 15, Nederman and Langdon Forhan (1993: 114).
- 10 Bracton, in Lewis (1954: 146).

- 11 Ibid.: 146.
- 12 Ibid.: 196.
- 13 Aquinas, *On Kingship*, Book I, ch. 2, in *ibid.*: 212.
- 14 Marsiglio of Padua, excerpt from *The Defender of the Peace*, Discourse I, ch. 17, in Nederman and Langdon Forhan (1993: 190).
- 15 Aegidius Romanus, excerpt from *De Ecclesiastica Potestate*, ch. IX, in Lewis (1954: 384).
- 16 John of Turrecremata, excerpt from *Summa contra Ecclesie et Primatus Apostoli Petri Adversarios*, ch. 71, in *ibid.*: 428.
- 17 Marsiglio, *The Defender of the Peace*, Discourse I, ch. 19, in Nederman and Langdon Forhan (1993: 198).
- 18 Lewis (1954: 94).
- 19 Ibid.: 96.
- 20 Ibid.: 97.
- 21 Ibid.: 97.
- 22 Ibid.: 90.
- 23 Ibid.: 93.
- 24 Ibid.: 4.
- 25 Ibid.: 194.
- 26 Ibid.: 195.
- 27 Councils of the church had played a crucial role in the formulation of Catholic doctrine and in making decisions about key elements of church governance. During the Middle Ages conciliarists were those theorists who argued that councils, rather than the Pope on his own, should be regarded as exercising the church's rule. This is not to say that they thought that a council should always be in session but that the conciliar rule was a way to properly place ultimate authority in the church.
- 28 Marsiglio, *The Defender of the Peace*, in Nederman and Langdon Forham (1993: 198).
- 29 Dante, *De Monarchia*, Book III, ch. 16, in Lewis (1954: 157).
- 30 Aquinas, *De Regimine Principum*, Book I, ch. 14, in *ibid.*: 178.
- 31 Ibid.: 178.
- 32 Ibid.: 179.
- 33 Aquinas, excerpt from *Commentum in IV Libros Sententiarum Magistri Petri Lombardi*, bk. 2, di. 44, q. 2, art. 3, in *ibid.*: 567.
- 34 Nicholas of Cusa, excerpt from *De Concordantia Catholica De Jurisdictione*, in *ibid.*: 192.
- 35 Ibid.: 260.
- 36 Bracton, excerpt from *De Legibus et Consuetudinibus Angliae*, *ibid.*: 282.
- 37 Ibid.: 379.
- 38 Marsiglio, excerpt from *The Defender of the Peace*, Discourse 2, ch. XXII, in *ibid.*: 397.
- 39 Ibid.: ch. XVII, in *ibid.*: 602.
- 40 William of Ockham, excerpt from *De Imperatorum et Pontificum Potestate*, II, *ibid.*: 608–609.
- 41 Ibid.: 609.
- 42 John of Turrecremata, excerpt from *Summa contra Ecclesie et Primatus Apostoli Petri Adversarios*, Book II, ch. LXX, *ibid.*: 422.
- 43 Chapter LXI, in *ibid.*: 422.
- 44 Chapter LXXI, in *ibid.*: 426.
- 45 Chapter LXXI, in *ibid.*: 427.

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34

SPHERES OF POWER

Stephen Lahey

It is impossible to avoid the almost constant tension between secular and sacred authority when reading medieval European history. But it is inaccurate to assume that secular and sacred nobles were simply in a constant state of jockeying for power, grappling blindly with one another as do the damned in Dante's *Inferno*. In fact, the seemingly ongoing conflict between secular and sacred authority defines the evolution of Western political philosophy from a mere justification of the political status quo to an innovative exploration of the possible forms a society might use to define its authority. From the twelfth century onwards, theologians and philosophers struggled with the corporate nature of Christian society and its relation to a developing understanding of the possibilities for justice and governance open to an economically complex, diverse society. A nuanced understanding of this struggle makes the events of early Modernity, namely the birth of the nation state, mercantile capitalism, and the Protestant reformation, comprehensible. But it also provides a useful means of understanding the tumult and innovation that defined late medieval society. In what follows, I will introduce the basic source for the juxtaposition of sacred and secular authority—Augustine's *On the City of God*—and briefly describe its defining force for the millennium that was to follow. Next, I will jump to the first important voice to enter into this discussion, John of Salisbury, a twelfth-century associate of Beckett, and a likely witness to his murder. John wrote before the re-introduction of Aristotelian political theory into European philosophy but shows a great interest in recovering the innovations of classical antiquity. In the century that was to follow, Thomas Aquinas was instrumental in setting the terms for describing the synthesis of Augustinian and Aristotelian conceptions of authority in the world. His student, Giles of Rome, moved from this Aristotelian model to one based in the hierarchical vision of heaven of Dionysius the Areopagite. Several other thinkers continued this dialogue between Aristotle and a Neoplatonist model for describing power, but in another venue, thinkers were reacting in a very different way to Aristotle's vision of social justice. Dante's *De Monarchia* shows his keen sense of the shortcomings of contemporary political practices, and Marsilius of Padua used Aristotle to explore the implications of completely separating the spheres of authority of church and state. William Ockham, whose philosophical approach allowed for an even wider distinction to be drawn between theology and natural philosophy, contributed to this dialogue in several important ways, not least by using canon law to delineate the concept of a natural right. Finally, I will discuss the beginnings of a redefinition of the spheres of authority in the first half of the fifteenth century, when Wyclif's redefinition of the church clashed with a conciliar redefinition of ecclesiastical authority at the Council of Constance.

At base, the whole story of political philosophy in Western Christendom, from the rise of Christian monarchy in the early medieval period to the maelstrom of the Protestant reformation, is comprehensible as an ongoing attempt at realizing Augustine's vision of the Two Cities. Today it can be difficult to convince students that *On the City of God* is important enough to have defined political discourse in the West for a millennium; it does not appear to be a book written for a casual or inattentive reader. What made it such a definitive work? The advent of Constantinian Christianity did more than legalize a religion. It made Christianity the state religion, which involved the eradication of heresy, the politicization of both the theology and daily practice of the faith, and it elevated the local bishop, the arbiter of orthodoxy as well as the regulation of daily life, to a position of great political power. Bishops became answerable to the emperor for the spiritual welfare of the people, which necessitated a political account of the close relation of secular and sacred authority. The episcopal office had become an instrument of the state.

External pressures from pagan opponents, as well as the protests of Roman critics of Constantine's redefinition of the state, presented a real threat to Christian Rome. Any case in which a bishop showed weakness or hesitation in the face of external or internal threats, like that posed by Donatism in North Africa, demanded immediate attention. But to frame this attention solely in terms of political necessity would make Christianity just another means to the end of continuing Rome's authority. The need was evident for the theological identification of a Christian polity.

The special identity of Christ as God-man provided political theorists with a divine source of human justice, an ideal for civic life, and an identity by which to define society. Unlike earlier Roman divinities, who were objects of worship without interest in the individual welfare of the citizenry, Christ provided a point of connection to the divine open to any faithful citizen. Christ was seen as more than the author of human salvation; as perfect Man, he was seen as the measure of human justice as well. His own references to the opposition between those who followed him and those who followed the world, the flesh, and the devil provided theorists with the basis for just the kind of Christian polity that would shift the identity of Rome from being merely a nation among nations to the embodiment of divine justice on earth.

Augustine had not been the first to define Rome in this fashion. Lactantius (d. 320) had written the *Divine Institutes*, incorporating Ciceronian ideals into an apology for the Christian state, but while influential, it was too reliant on classical, pagan ideals to provide the theological definition of society that the rapidly changing Roman world required. In a clear departure from the classical ideal, Augustine famously formulated the Two Cities to describe two competing historical narratives. Critics of Rome's turn to Christianity were suggesting that the empire's dissolution in the West was a direct result of Constantine's decision, and Augustine's response was to argue that Rome had sown the seeds of her own destruction long before, in the seemingly halcyon days of the Republic. To make his case, he distinguished between the species of justice men invented using human reason and social convention, and the justice instituted by God in Israel and perfected with the Incarnation. These two competing versions of justice were the basis for the Two Cities.

As Augustine sees it, the result of the Two Cities, and their mutually exclusive ideals, are two competing historical narratives. In the City of Man, a civilization emerges from obscurity, flourishes for a time, and ultimately collapses from the inevitable weaknesses that develop as time passes. In the opposing narrative of the City of God, the children of Israel move through distinct ages, or dispensations, to the pivotal point in the history of creation: the Incarnation. With Christ's coming, the inheritance of Israel is opened to all peoples, and a new earthly community is born, the body of Christ on earth. Its goal is complete realization in the eschaton as the Heavenly Jerusalem. Until then, it exists at odds with the ideals of the City of Man.

Readers from Augustine's time onwards have made the natural identification of the City of God with the Roman church. Certainly, many of the figures to follow here did this. But Augustine

only rarely makes this connection. He expressly identifies membership in the City of God through individual intent rather than ecclesiastical office, commenting that a bishop who takes his office motivated by a desire for honor rather than to serve God is no bishop at all.¹ On the other hand, he occasionally notes that the holy church as it was being built on earth is the City of God.² Scholars remain divided on how to understand Augustine's mind on the subject. Historically there have been two distinct readings. Some have the Roman church identified with the City of God, while others have identified the City of God with the congregation of the elect. More recently, it has been argued that Augustine's intent was to leave the issue murky to emphasize the individual's place in the City over a corporately defined identity.³ A more nuanced understanding arises from a reading of Augustine's letters regarding the schisms threatening the church in North Africa; he deliberately avoids engaging in doctrinal arguments in many cases in favor of encouraging his correspondents to investigate the circumstances of the disagreement, what led schismatics to be sufficiently convinced of their own rightness to depart from the church of Rome.⁴ Pope Gelasius (d. 496) provided later theorists with the opportunity to read Augustine as having equated the City of God with the church, in his letter responding to a schism that had arisen between Byzantine and Roman Christianity, in which he identified God as having ordained two distinct authorities. The first, that of the priests, is a higher authority, while the second, that of kings, has only secular power. This famous formulation became known as the Gelasian doctrine and led to the Two Swords theory that was to dominate medieval political theory.

The twelfth century found the papacy becoming the dominant political power in the Latin West. Under the guidance of Innocent III (1161–1216), the church acquired the legal and political structures of a state. Leo IX (1002–1054) and Gregory VII (1020–1085) had secured papal autonomy in what functioned as an absolute monarchy, with all laity subject to its ecclesiastical authority. During a sustained struggle for authority with the Holy Roman Empire (1075–1122), the papacy wrested the power of ecclesiastical appointments from secular hands, thereby securing itself as a self-defined institution. Two theoretical models developed to describe this new papal authority. In one, the pope's authority surpassed all earthly power, both sacred and secular, in what is usually referred to as a "hierocratic" model. Again, one could understand the two spheres of authority as largely distinct from one another, a generally dualist model. Each contained elements of the other: the hierocratic model was compelled to recognize secular authority as something distinct in many ways from that of the clergy, while the dualistic model frequently involved papal authority as the final word in otherwise unresolvable problems.⁵ Both models will feature in what follows.

Hugh of St. Victor (1096–1141) referred to the two powers functioning together within the greater sphere of the Universal Church. But the two were not equal. God instituted the spiritual power and intended that it found and govern the secular authority of king and emperor. There is no mistaking Hugh's identification of the spiritual power with the papacy. Hugh was no political theorist, but his *De Sacramentis*, in which this papal argument figures as he describes the various orders of the clergy, was to be very influential in the centuries to come.⁶

The first original philosophical articulation of a division of authority between the sacred and secular is John of Salisbury's (1115–1180) *Policraticus*. John was active in the court of Henry II, a friend of Beckett, and one of the great minds of the twelfth century, masterfully incorporating the ideals of classical antiquity into contemporary issues. He envisioned an organological model of the *res publica*, in which the state is structured like a living body, with the prince as its head, his liegemen as its limbs and organs, and the clergy as its soul. The goal of society is the common good, and this should be foremost in the prince's minds. The common good necessarily entails the salvation of all members of the body, and to that end, the church has entrusted the secular sword to him. The prince has autonomy, but it is not absolute; the clergy is the body's soul, and the body exists not only for physical welfare, but to allow the soul to realize its goal.⁷

John envisions the prince as heir to the biblical priest-king Melchizedek (Genesis 14:18–20), entrusted with secular authority to protect the body politic, yet subject to the spiritual guidance of the clergy, whose ministry is more elevated. He provides examples of a just prince sacrificing himself for the welfare of the people, such as that of Codrus of Athens, but explicitly referring to Christ's sacrifice as the reason why these pagan models are apt. The appointed servants of Christ are responsible for interpreting and teaching Christ's word, and the prince's function is to exemplify it. In John we see a combination of the hierocratic model of papal authority mixing into a dualistic model of secular and sacred authority. With the recovery of Aristotle's political thought, such a balance would be much more difficult to attain.

More common than John's organological model in the twelfth and thirteenth centuries was the image of two swords, which has its roots in Luke 22:38. The disciple's proffered two swords are called "enough" by Jesus, and following Pope Gelasius I in the fifth century, many medieval readers understood this to signify a division between spiritual and secular authority.⁸ The image of two weapons representing power was not jarring to Christian thought: the spiritual sword is used to combat threats to the spiritual welfare of Christendom just as the material sword is used to fight temporal enemies. As with real swords, those who would wield them must be skillful, swift, and strong. Kings and emperors are easily imagined to have developed these skills for statecraft, but the clergy, too, were expected to engage in either defensive or offensive combat in defense of the church and its authority. Some theorists were content to envision a balance of power holding between the bearers of the swords, but more frequently, the imagery was used to emphasize the authority of one over the other.⁹

One of the first to do so was Bernard of Clairvaux, who urged Eugenius III to gain mastery in the Holy Land, saying, "Both swords are Peter's: one is unsheathed at his sign, the other by his own hand, as often as necessary." Bernard's intent was not to demonstrate papal authority, but his comment that one is unsheathed at Peter's behest led to later arguments for the papacy's right to command kings and emperors.¹⁰ The Camaldolese monk Johannes Gratian composed the *Decretum* in 1150 to organize canon law for the growing ecclesiastical machinery. The many canon lawyers who developed commentaries on Gratian over the next several centuries engaged in the same dialectical give and take that theologians used in their *Sentences* commentaries. The canonists developed many of the concepts and arguments that characterize medieval political thought, and their disputation made considerable use of the two swords model. Not surprisingly, many canonists landed on the side of the pope having supreme authority over both swords.¹¹

The recovery of Aristotle's thought provided thinkers with a new model with which to understand the basis for political power. While the two swords model remained influential, political theory in the thirteenth century and beyond became more profoundly oriented toward Aristotle's teleological model. The most influential theologian in the overall scholastic shift to Aristotelianism was Aquinas, and while his political thought is certainly not as well developed as other aspects of his philosophy, its simplicity encapsulates a prevalent papalist position. The essence of Aquinas's position can be found in II *Sententiae* d. 44, a. 4, where he explains that God has ordained both spiritual and secular power. Insofar as a power applies to salvation, the spiritual power is always to be obeyed over the secular. But regarding civic welfare in itself, the secular power's authority is superior to that of the priest. The exception is when spiritual power is vested with secular power, as with the pope, "who holds supremacy of both powers from the disposition of Him Who is both priest and king."¹² The implication is a general separation of spheres of authority, with the papacy having the final say in both spheres. This appears again in IV *Sententiae* d. 37, where he cites Bernard's letter to Eugenius.

Thomas's political thought is more fully presented according to Aristotelian ideas in his *De Regno*, a brief work commissioned by the King of Cyprus, although it is by no means a developed work of political philosophy.¹³ Here he explains that man, the social animal, is best able to be

happy with other people, and so a state governed by a king is natural to human life. Aristotle argued for a constitution in which a balance should be struck between governance by the many, common people and the few, noble and wealthy people, because since kingship may be the most efficient species of government, a truly just king is exceedingly rare.¹⁴ Aquinas is less inclined to this judgment, and argues that it is easier to keep the peace with one ruler in authority rather than with several working together.¹⁵ If happiness on earth were man's only goal, this would suffice, but because the faith teaches that eternal salvation is the highest goal, the king must recognize the papacy as the higher authority. As in his *Sentences* commentary, in the *De Regno* the Pope's authority is final, and kings are ultimately subject to it, although Aquinas's earlier assertion that the pope commands the two swords does not appear in *De Regno*. This is not the end of the matter, though. Aquinas takes up the question of obedience to apostate secular lords in *Summa Theologiae* II.IIa, q.12, a.1, and argues that papal authority extends to curbing secular authority in such cases. When a king is excommunicated, his subjects are thereby absolved from the need to obey him. Given the political struggles of the period between popes, emperors, and kings, it is clear that Aquinas perceives the former as the final earthly authority. This does not make Aquinas an advocate of a hierocratic papalism, though; that position was most fully developed by one of his more notable students.

Giles of Rome (d. 1316) likely studied with Aquinas between 1269 and 1272, and became one of the leading theologians of the Augustinian friars, and eventually, an influential voice in the papal curia, as well as Bishop of Bourges. He is an example of the difficulty of associating complex thinkers with easily described positions, having written two works on political theory with distinctly different viewpoints. The first, *De Regimine Principum* (c. 1277–1280), represents a simplified Aristotelian articulation of the supremacy of monarchy in secular government. It takes the form of a “Mirror for Princes” treatise, an instructional manual for the practical exercise of rule, and would become very popular in the later middle ages, despite its author's later, more developed position. This he developed, perhaps in response to John of Paris, between 1296 and 1302, first in *De Renunciacione Papae* (where he articulates the legitimacy of Celestine V's unprecedented abdication), and most fully in *De Ecclesiastica Potestate*, a defense of Boniface VIII's claims to absolute authority. Here Giles describes all power as emanating directly from God and flowing downwards through the celestial hierarchy, to a single entry point in creation: the papal see. From the pope, just power likewise flows outward and downward in two mighty streams, the first, to the secular rule of emperors and kings, both of whom rule at the pope's behest, and the second to ecclesiastical authorities, who rule at the pope's direct command. Giles embraces the two swords analogy, and emphasizing the duty of material being to obey the spiritual realm while equating ecclesiastical authority with the papacy, he places the pope at the apex of all created human authority. This position, popularly known as “hierocratic papalism,” would influence later papal theorists, most importantly Augustinus Triumphus (d. 1328). Giles's top-down model would also influence John Wyclif (d. 1384), who used it to argue just the opposite position, namely the absolute power of a grace-inspired civil lord.¹⁶

Giles was not the only defender of Boniface VIII; another Augustinian friar from Viterbo, James Capocci (1255–1308) composed *De Regimine Christiano* (1302), and was later named Archbishop of Naples. James of Viterbo begins by describing the church as a community as defined by Aristotle in *Politics* I (1252a1), which ought rightly to be governed by a king. Boniface had recently promulgated the bull *Unam Sanctam*, which had declared the absolute spiritual supremacy of the pope, and James moves from a commentary on the creedal “one, holy, and catholic” definition to an exploration of the bull and its logic. The meat of the work can be found in the longer, second part, which begins with an analysis of the three kinds of power in the world: the power to work miracles, priestly power, and royal power. Priestly power is employed in the sacraments, while royal power is used to govern and judge in matters that are both secular and spiritual. This may seem to point toward a monarchist position, but James's vision is more of the relation of an executive to an employee: the

priestly power subjects both laity and clergy, while the royal power really only concerns issues of import to the laity. Temporal power may dictate the administration and property of the church, he argues, but this is only secondary to its true business, which is sacramental. James's *De Regimine* is often overshadowed by Giles's *De Ecclesiastica Potestate*, but the two works taken together are the most complete defense of papal authority of the medieval period.¹⁷

Giles likely had the French philosopher Jean Quidort (1240–1306), known as John of Paris, in mind in his articulation of a Neoplatonic papalism. Quidort, a Dominican friar, was no stranger to controversy, having been accused of misinterpreting Aquinas's thought as well as of heresies of his own. Late in his life, he took the side of Philip IV in his bitter quarrel with Boniface VIII, and developed a careful Aristotelian theory of monarchy in his *De Potestate Regia et Papali* (1303). Like contemporary readers of Aristotle, he privileged monarchy over the other forms of government, and indicates the likelihood of the need for many states, given the variance among people, each of whom requires the society of fellows to achieve happiness. And just as all seek earthly happiness, so all have salvation as a supernatural goal, which requires a priestly class, instituted by Christ to assist in attaining it. The two spheres of power are not subordinate to one another, though, which is a departure from the direction of contemporary arguments; they are so different that it is a mistake to attribute any spiritual power to kings, and any temporal authority to any priest, especially to a pope. The result is a denial of any ownership, lordship, or power of legislation or governance in the secular world to the pope. The question of excommunication as an avenue of last papal resort leads John to comment that, while a pope may excommunicate, it is the place of a sinful king's subjects to depose him; excommunication in itself is purely a spiritual matter, and not truly political. Excommunication is only a question of spiritual sin, like heresy or apostasy. For John, it is up to the kingdom's nobility to punish a sinful king for any sort of secular tyranny.¹⁸

The bitter struggle between Philip IV and Boniface VIII prompted Dante Alighieri to compose *De Monarchia* (1312), where he argues the need for one central worldly authority, using a similar line of Aristotelian reasoning. The secular power is instituted by God directly to provide for cohesion in civil life, and on the reasoning that what one agent can do is better done by one rather than by many, that secular power should be the Emperor. The model for this can be found in the history of Rome, who gives the example of Augustus as someone divinely ordained to lead Rome to its glory. Regarding the venerable two swords argument, Dante is ready to match Boniface verse for biblical verse, arguing that the swords Christ gave were to set man against one another in a spiritual sense, and not to illustrate secular justice.¹⁹ The church's sphere is wholly spiritual, and any case in which it strays into secular affairs, Dante argues, is a matter of grave error. Dante was to be disappointed in his expectations regarding the Holy Roman Emperor, and his arguments are important for understanding the political undertones in his magnificent *Comedia*.

Marsilius of Padua (1275–1342) marks a sea change in arguments about the proper relation of secular to ecclesiastical authority. John of Paris had used Aristotelian teleological reasoning to separate the secular from the sacred, but Marsilius turned from the assumed divine origin of both monarchic and papal power to a republican model. The origin of all human authority is human, so both pope and king have their power to legislate and coerce not from God, but from those they govern. Considered as a refutation of papalism, this changed the argument, bypassing theology altogether in favor of a reasoned, historically oriented account of the office's origins at the beginning of Christianity. The secular lord's authority is easily recognized as having developed from the consent of the people and does not need divine origins to legitimate it. Likewise, the papal habit of making claims of universal authority contravene both reason and Scripture, and constitute a form of tyranny. The logical source of correction is the lower clergy, specifically the bishops, acting in concert in a Council to realign papal authority. Given the emperor's responsibility to the people for their spiritual well-being, Marsilius concludes, it is only reasonable to expect that he will aid a council of bishops in redefining papal power.²⁰

William Ockham (c. 1287–1347) turned to political thought because of the dispute between the Franciscan order and John XXII over the friars' claims to renounce property while retaining the use of property owned by the Church. John argued that Roman law precluded this arrangement, which, because the friars argued that Christ and His disciples had owned nothing, John interpreted as the Franciscans putting themselves above the Church. Ockham engaged with John in defense of his order, and in the course of their acrimonious dispute, developed a unique picture of the relation of secular and ecclesiastical power that neither subordinated one to the other, nor sought an Aristotelian compromise between them. The two powers are different in kind, meaning that papal claims to political authority are groundless, as are secular attempts to legislate spiritual issues. Ockham does not go so far as Marsilius as to deny the papacy's divine commission, but he did perceive some flexibility in its structure. Christ would permit periods in which several popes might govern, or even periods in which there were no pope, but only an affiliation of patriarchs, depending on the needs of the Church. Because the pope's sphere was restricted to the purely spiritual, he could not forbid the Franciscans to abjure property ownership if they so desired. This was a matter of choosing to exercise a natural right, Ockham argued, which is outside the papal purview.

Ockham likewise viewed secular authority as generally, but not exclusively, monarchic in structure. The emperor holds power by virtue of the empire's history and divine favor, but the main foundation for imperial power is the people, who brought the empire into existence under the Caesars. Like the pope, the emperor is himself subject to divine and natural law, as well as the *lex gentium*, the body of human law recognized to be common across all peoples. While Ockham did not see himself as a political theorist, his thought on the ordering of the church and state, developed in the course of his arguments with the papacy and his appeals to the Emperor for support, is notable. Both authorities are subject to bodies of law that restrict any attempts to claim absolute power, and neither pope nor emperor can hope to grasp the final authority that many medieval theorists assumed to be at stake.²¹

The last important development in the medieval struggle to define the relation of secular and sacred authority began with John Wyclif's (d. 1384) formulation of a monarchist argument and ended with Europe's first true revolution in Bohemia. John Wyclif, an eminent Oxford philosopher, developed an argument for the supreme authority of a civil lord, or king, over both secular and ecclesiastical affairs, borrowing the model for power distribution used by Giles of Rome. Instead of identifying the pope as the divinely ordained font of all human authority, Wyclif argued that grace placed a just civil lord in that place in his kingdom. He agreed with the Franciscans about the place of poverty in early Christianity and demanded that the king divest the church of all its secular trappings, especially property and political power. The final legal authority for creation, Wyclif argued, is neither natural nor human law, but the eternally pure law of Scripture, which he called *lex Christi*. This meant that a king is not merely a secular authority, but God's primary steward of creation, for whom the Bible is the law code by which to govern.²²

Wyclif's political thought was quickly condemned, and likely would only be viewed as a reactionary curiosity had his writings not inspired a generation of Czech scholars at Charles University in Prague in the first decade of the fifteenth century. Wyclif's ideas blended easily with extant Bohemian reformatory thought and his contention that Scripture is the sole basis for human justice especially moved Jan Hus (d. 1415) in his critique of the church. A Council had been summoned at Constance in 1415 to end the ongoing stalemate of the papal schism, and a conciliarist approach signaled a widespread desire among the bishops to curtail unrestrained papalism. Hus's forceful argument that Christ alone has the kind of power the bishops were exercising at Constance led to his condemnation for heresies many of the bishops present recognized as, in themselves, unremarkable. His execution catalyzed a desire for a national, Czech church in Bohemia, governed by Scripture alone. This sentiment, embraced across the spectrum of social classes, led to the violence

of the Hussite revolution. The thread linking Wyclif's political thought with Hussite ideology is a redefinition of the final authority governing the church, from the accepted, canonically defined model of the papacy, or the conciliarist model suggested by Marsilius of Padua, among others, in favor of a church governed and defined by Scripture alone, with few clergy and some just nobles. That the Hussite revolution ultimately collapsed upon itself is not as important as the fact that its precedent inaugurated a new understanding of the relation of secular to sacred authority that would soon flourish with the coming of Protestantism.²³

Notes

- 1 *City of God* XIX.19.
- 2 *City of God* VIII.24; XIII.16; XX.11.
- 3 Markus (1989).
- 4 E.g., Letter 87 To Emeritus, in Augustine (2001: 140–143).
- 5 See Canning (1996: 82–110).
- 6 Hugh of St. Victor, *De Sacramentis Christianae Fidei*, Bk.II, II.2.3.4. See Watt (1991: 368–372); Rorem (2009: 92–95).
- 7 John of Salisbury, *Policraticus* Bk.IV, c.2, in John of Salisbury (1990: 35–38).
- 8 See Field Jr. (1998).
- 9 See Watt (1991).
- 10 Bernard of Clairvaux (1993: 21). See also Watt (1991: 372–373).
- 11 Wintroth (2000) and Brundage (1995).
- 12 *Super Sententiis* II D.44 a.4, in Aquinas (1988: 260).
- 13 A more developed work, *De Regimine Principum*, long associated with Aquinas, is the work of Ptolemy of Lucca, an associate of Aquinas. *On Kingship* may have been completed by Ptolemy as well.
- 14 Aristotle, *Politics*, 1283a21.
- 15 Thomas Aquinas (1982: 10–12).
- 16 Giles of Rome (1929) (English translation in Giles of Rome 1986), (ibid.: 1992), Briggs (1999), Eastman (1992), and McAleer (1999). For a complete bibliography, see Lambertini (2014).
- 17 James of Viterbo (1995).
- 18 John of Paris (1974) and Coleman (1983).
- 19 Dante, *De Monarchia*, Bk.3, a.9; See Matt. 10:34.
- 20 Marsilius of Padua (1980), (ibid.: 1993), Gewirth (1951), Moreno-Riano (2007), and Moreno-Riano and Nederman (2011).
- 21 Ockham (1992), Ockham (1995), McGrade (1974), Spade and Panaccio (2016), Kilcullen (1999), and Shogimen (2007).
- 22 See Wyclif (2001), (ibid.: 1993), Wilks and Hudson (2000), and Lahey (2003).
- 23 Kaminsky (1967), Fudge (2010), and (ibid.: 2012).

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DEMOCRACY AND REPRESENTATION

Takashi Shogimen

In the third quarter of the twentieth century, Walter Ullmann, one of the leading authorities in medieval political thought, argued that the history of political thought in medieval Europe could be characterized as “a history of the conflicts between [the] two theories of government”: the descending and ascending theses of government. The descending thesis is the view that the source of power consists in a supreme being, namely God. God appointed his “vicar” on earth, who embodied the power of the divine origin. The ultimate foundation of power in this world is divine, and human beings have no power unless it is given “from above.” The ascending thesis, by contrast, is the view that the source of power consists in the people or the community. Ullmann observed that the idea which attributed the foundation of this worldly power to the people derived from the Germanic tradition, described by Tacitus. According to this thesis, no public power exists unless the people—or their popular assembly—elects a leader. Thus the ruler who is conferred power by the people is considered a representative of the community (Ullmann 1970: 12–13).

As the public landscape of Western Europe was increasingly dominated by the Roman Church, according to Ullmann, the descending thesis penetrated the theory and practice of government. However, “populism” or the idea of popular sovereignty was rooted in the Roman republic and Germanic customs. He also observed the germination of the descending thesis in the feudal practice that the king was legally bound to seek the counsel and aid of his nobles in all matters touching upon the common needs of the realm. The ascending thesis gained momentum with the reception of Aristotle’s *Politics*. The new Aristotelian political science, which became available in Latin translations in the mid-thirteenth century, displaced the hierarchical model of government by underlining the ascending thesis with philosophical force. Ullmann argued that Aristotle introduced the new idea of the citizen as an active participant in politics thus undermining the holistic idea of humans as Christian believers under the universal rule of the Roman Church. This is known as Ullmann’s “Aristotelian revolution” thesis: Ullmann suggested that the origin of the idea of popular sovereignty that underpins modern democracy and representation can be traced back to the late thirteenth century.

Since Francis Oakley’s critique (Oakley 1970), Ullmann’s descending and ascending thesis has been subject to criticisms. Today few experts of medieval political thought deploy Ullmann’s thesis as an analytical framework because they find it too “simplistic” (Black 1992: 12). Indeed, Ullmann tried to discern the origin of modern democracy in late medieval political thought, but was the history of late medieval and early modern political thought continuous? The purpose of the present chapter is to explore this question by focusing on late medieval political ideas, which have often been associated with modern democratic thinking, in particular the ideas of

representation and consent. Recent scholarship suggests that medieval ideas of representation and consent are qualitatively different from modern ones.

Three Ideas of Representation: Personification, Mimesis, and Delegation

The medieval theory and practice of representation was diverse; medieval Europe knew a variety of representative bodies including parliaments and church councils. The primary role of parliaments was to grant the ruler the power to tax for specific purposes, typically war. Ecclesiastical councils resolved doctrinal and disciplinary issues in the church.

While representation was ubiquitous in the sphere of secular politics, it was hardly translated by political thinkers into a sophisticated theory. It was in the context of ecclesiology (the theory of church organization and government) that the idea of representation was theoretically refined (Oakley 2003). One can find a coherent and comprehensive theory of representation in the ecclesiology of the German cardinal, canonist, and mystical thinker Nicholas of Cusa (1401–1464). In the medieval theory of representative government, there were three ideas of representation: representation by personification, mimesis, or delegation (Tierney 1983). All three ideas find their place in Cusa's cosmological vision of the church.

According to the idea of representation by personification, a whole community is taken to be present symbolically in the person of its head. In the context of medieval ecclesiology, the pope may be seen to represent the church figuratively as he personifies the church. An important implication of representation by personification is that such representation does not necessarily entail any democratic connotations (Tierney 1983: 26). While the whole authority may be vested with the community, the community is embodied by the representing head. Theologians of the Augustinian Order such as Giles of Rome (c. 1243–1316) and Augustinus Triumphus (1243–1328) argue that the pope can be called the church, thus presenting an extreme monarchical view of papal absolutism. Likewise, in *The Catholic Concordance* (1433) (Nicholas of Cusa 1959, 1991), Cusa envisages organic harmony within the Christian society embracing both the Roman Church and the Holy Roman Empire and discusses the ways in which the pope and the general council represent the universal church. In the Book 1, which discusses Christian society, Cusa argues that the faithful are united to the bishop because, as St. Cyprian maintained, “the church is in the bishop.” In this context, Cusa writes that the bishop represents and symbolizes (*figurat*) the church as a public person (Nicholas of Cusa 1959: 58; *ibid.*: 1991: 25; Sigmund 1963: 165).

The second idea of representation by mimesis is that a group is seen to represent a whole community because the former “mirrors in its composition all the varied elements that make up” the community (Tierney 1983: 25). The Franciscan theologian William of Ockham's (c. 1285–1347) encyclopedic work, *The Dialogue* (Ockham 2013), presents the view that the council mimetically represents individuals of diverse social roles including not only churchmen but also the laity. However, the *Dialogue* is a work in which Ockham illustrates a wide range of political and ecclesiological views without disclosing his personal opinion clearly. The consensus among experts is that Ockham's ultimate position on any representative government by mimesis (or indeed in any other forms) was negative. Cusa presented the idea of representation by mimesis when he maintained that the pope is only representative of the whole community of the faithful “in a very general way (*confusissime*),” while the council is a “more certain (*certius*) representation” of the whole church. The reason is that the council includes more “public persons” such as patriarchs, cardinals, archbishops, and bishops. In arguing so Cusa had in mind the immediacy of the group to the representative who represented them and concluded that “it is . . . clear that the more specific the rulership, the more certain and less vague the representation by the ruler” (Nicholas of Cusa 1991: 124). The council that contains more “rulership” than the pope alone would represent more groups, thus representing the whole church more exactly.

Finally, the third idea, representation by delegation, means the delegation of authority to the representatives by those whom they are to represent. An important ramification is that the representative only possesses the derivative and limited authority conferred by those whom they represent; therefore, should the representative be judged by those whom they represent to be abusive, such authority can be removed from them (Tierney 1998: 4). If the pope is the representative of the church in this sense, his power is, unlike the case of representation by personification, conferred and limited by the church.

It has long been suggested that the Italian political philosopher Marsilius of Padua (c. 1275–1342) is a pivotal figure in developing the medieval discussion of representation by delegation (Quillet 1988). In his controversial *Defender of the Peace* (1324), Marsilius argues that the general council consisted of priests and experts in divine law who are elected by all the communities in the church, thus “representing the universal body of the faithful through the . . . authority granted them by those other universal bodies” (Marsilius of Padua 2005: 368; *ibid.*: 1928: 320). His argument for conciliar supremacy is anchored not only in his radical ecclesiology that rejects papal primacy but also in his generic theory of the political community. Marsilius famously maintains that in both the civil and ecclesiastical community the authority to make law and institute rulers derives from the consent of the whole community or its “weightier part (*valentior pars*).” To some, Marsilius’s language resonates even the modern “democratic” concept of representation (Morrall 1958: 117).

Marsilius is certainly not an isolated instance of propounding the idea of representation by delegation. *The Catholic Concordance* serves as a case in point once again. Cusa writes that the council consists of “presiding officers (*presidentes*)” and “representatives (*legati*),” a type of elected representative of various communities in the church, who give the consent of all the faithful (Sigmund 1963: 167). The term *legati* also refers to the college of cardinals, who “take the place of others in electing the pope.” This idea of representation by delegation is united with the idea of representation by personification. Christ established the office of bishop and each bishop symbolically represents the church; however, it was also election and consent that established a bishop as a representative of the church. Cusa summarizes this succinctly: “all legitimate authority arises from elective concordance and free submission. There is in the people a divine seed by virtue of their common equal birth and the equal natural rights of all men so that all authority—which comes from God as does man himself—is recognized as divine when it arises from the common consent of the subjects” (Nicholas of Cusa 1959: 348; *ibid.*: 1991: 230). Both representation by delegation and that by personification are anchored in a theological foundation. E. F. Jacob’s view that the concept of the church advanced by leading conciliarists had “a theological, rather than a political or constitutional, basis” (Jacob 1943: 3) hits the mark on Cusa’s understanding of representation.

Political Representation

Jacob’s observation provides another perspective on the historical understanding of the idea of representation: was the medieval notion of representation political? What the twentieth-century political philosopher Hannah Pitkin (1967) calls “political” representation is predicated on the idea that representatives need to act at the behest of the body they are representing in the context of negotiating the conflicting interests and desires of various groups that constitute the entire community. Drawing on Pitkin’s idea, Cary J. Nederman (2009: 99–121) argues convincingly that the theoretical concept of political representation is absent from medieval political thought. One heuristic feature of the concept of political representation is that representatives must concern themselves simultaneously “with the interests of constituents (regardless of their wishes) and the wishes of constituents (regardless of their interests)” (Nederman 2009: 102). “Political” representatives, therefore, who act at the behest of the constituents, have discretionary power in order to

act for the interest of the constituents, which may be against their wishes. Thus consent is not *the* defining characteristic but only a significant feature of political representation.

Nederman argues that Marsilius's idea of representation in his discussion of conciliar supremacy clearly differs from political representation (Nederman 1995: 85). The business of the general council is not to engage in such negotiations of conflicting interests and desires but to determine the meaning of Scripture. "Representatives" at the general council are not required to canvas and reflect the wishes of individual believers. Furthermore, the definition of the correct meaning of Scriptural text is not the work of human deliberation but is inspired by the Holy Spirit. Guided by the Holy Spirit, the "representatives" only serve one genuine interest, that of the church and its members: the preservation of orthodox faith. In defending orthodoxy, the members of the church see no conflict between their interests and their wishes. Even though Marsilius writes that the general council "truly represents, through succession, the gathering of the apostles and other elders of the faithful at that time" (Marsilius of Padua 2005: 361), his idea of representation is far removed from the concept of "political" representation; rather it is more aptly labeled as "spiritual representation" (Nederman 1995: 84–85). On this point, late medieval conciliarists are not very dissimilar to Marsilius.

The absence of "political" representation is not limited to Marsilius's discourse on conciliar supremacy but may be observed in his generic discussion of the legislative process in the political community in the first discourse of the *Defender of the Peace*. Marsilius claims famously that the weightier part (*valentior pars*) "represents the whole" of the community (*totam universitatem repraesentat*)" (Marsilius of Padua 2005: 68). The rationale for singling out "the weightier part" as representatives is that they should collectively reach a common decision on "common advantage" because individuals of "a stunted nature" due to their malice or ignorance disturb the common view (Marsilius of Padua 2005: 68). The weightier part represents the voice of rational individuals, which is supposed to be revealed simply by eliminating the noise of irrational voices. This form of "representing the whole community" differs significantly from "representing" diverse and conflicting wishes and interests of individuals in the community (Nederman 2009: 108–111).

Closely associated with the medieval idea of representation by delegation is the Roman Law concept of *plena potestas* (full power) or *plena auctoritas* (full authority), which was assimilated into medieval canon law. Gaines Post (1964: 91–162) asserts that *plena potestas* is one of the key concepts that define the procedural relationship between the communities and the central authority from the middle of the thirteenth century. A representative with *plena potestas* conferred by a community, ecclesiastical or secular, typically had only a limited mandate which obliged them to withhold consent to any demands of the ruler beyond the mandate given by the constituents. Referring back to the constituents for further instruction, however, is obstructive to efficient decision-making; hence, a powerful ruler demanded that communities equip their representatives with *plena et sufficiens potestas* (full and sufficient power) to consent to the ruler's proposals.

Plena (et sufficiens) potestas implies that what needs to be consented is determined in terms of mandates *before* negotiations between the ruler and the representatives (Monahan 1987: 125). This means that the "representative" with *plena (et sufficiens) potestas* is no more than an instrument of the constituents, for whom it is procedurally compulsory to adhere to whatever the constituents determined prior to the negotiation with the ruler. Thus the delegated authority in terms of *plena (et sufficiens) potestas* is far from the idea of popular sovereignty, which limits the ruler's power; on the contrary, it obliges the representative to consent to whatever proposal was presented to them by the ruler. Thus the medieval idea of representation by delegation underpinned by the notion of *plena potestas* entails no discretionary power, which enables the representative to negotiate a balance between the interests and the wishes of the constituents.

Democracy

Democracy is not an idea cherished by medieval political thinkers. The term democracy was certainly known to political writers through the Aristotelian taxonomy of political constitutions. As Aristotle lays out in Book 5 of his *Politics*, there are three legitimate constitutions that serve the common good: monarchy, aristocracy, and polity. Accordingly, there are three illegitimate constitutions that do not serve the common good, namely: tyrannical monarchy, oligarchy, and democracy. Democracy is not even among legitimate political constitutions. Moreover, medieval political thinkers often discussed tyranny, while they wrote much less on oligarchy and democracy as “diseased” regimes.

Alexander Passarin d’Entrèves (1967: 197) writes:

it was only when the idea of consent finally came to be associated with that of an equal right in each individual to share in the establishment and exercise of power, that the distinctive features of modern democratic theory began to emerge into full daylight.

Such an association did not occur in the Middle Ages; however, the two ideas—consent and the equality of individuals—found their own place in medieval Europe. The notion of human equality was obviously not part of the legacy of Aristotle’s political philosophy, which deemed slavery to be natural. The moral equality of humanity was claimed—a few centuries after Aristotle—by Cicero and Seneca as well as the Christian fathers despite the hierarchically organized structure of medieval society; for example, the notion of equality crystalized as the idea of equality before the law and the recognition of natural rights in individuals. Indeed, the doctrine of the natural equality of humans is as old as the Stoics, constituting the natural law tradition, which continued to thrive in the Middle Ages.

Medieval political thinkers did not discuss the establishment and exercise of power in terms of the contractual association of equal individuals but in terms of the whole people as a corporation (*populus*). The idea that the people as a whole is the source of legitimate power derives from the twelfth-century Roman lawyer Azo. According to his legal theory, the people as a whole institute imperial power by ceding, not transferring, power. Thus the people retain the power to legislate and abrogate law after the institution of an emperor. Azo maintains that individual members of the people are less than the emperor but the emperor is less than the people as a whole. This argument was transferred to the conciliar framework in the late Middle Ages in order to argue that individual Christians cannot judge the pope but the pope can be judged by the corporate body of the church or the general council as its representative (Tierney 1983: 56–60).

The idea of the corporate body of the people as the source of legitimate power has typically been labeled as “popular sovereignty” (or “populism”) (Ullmann 1970; Tierney 1982) but may be categorized better as a weak type of “popular sovereignty,” in the sense that it de-emphasizes the role of individuals thus making the corporate authority of the people formal and symbolic. A strong type of “popular sovereignty” on the other hand is underscored by the active participation of individuals in the collective decision-making process (Nederman 1995: 74–75). Given the ambivalence of the concept of “popular sovereignty” which entails modern connotations, one needs caution in framing medieval discussions of the authority of the people when using that term. Perhaps a careful examination of the idea of consent is a surer path to pursue.

Consent

Medieval society was indeed full of consensual practices. Feudal vassalage is based on mutual consent between lord and vassal. Parliaments were summoned by the king to gain consent for

taxation. Collective decision-making in medieval guilds and communes rested on consent (Black 1984, 2009). Medieval intellectuals were also aware of the Ciceronian notion that a political community was a multitude associated by consent (Tierney 1982: 40). The notion of consent did not only find wide application but was also translated into theories. The idea of consent is indeed one of the most significant features in the medieval theories of the origin and legitimacy of government.

Perhaps one of the most important contributors to the medieval development of the idea of consent is the Dominican John of Paris (c. 1255–1306). John's *On Royal and Papal Power* (John of Paris 1969, 1971) represents the first systematic and critical response to papal absolutism propounded by Giles of Rome and James of Viterbo, although it remains subject to scholarly debate whether John wrote the treatise in defense of the cause of the French crown, which was locked into a conflict with the papacy. The main thread of his argument is the rejection of the papal absolutist view that the pope is the singular fount of all powers, spiritual and temporal. For John, jurisdictional power is the power of a human ruling or a judgment over other humans; thus, it is not supernatural but merely human. The jurisdictional power of both kings and popes falls within the realm of natural causality, and the source of human—not supernatural—power is the consent of the human community (Canning 2011: 52–53; Oakley 2012: 222). Thus the deposition of a tyrannical ruler, ecclesiastical or secular, is possible with the consent of the people.

Marsilius considers consent to be the cornerstone of the legislative procedure. He insists that the community of citizens is the final determinant of law as the expression of their common welfare, and the consent of the citizen body is “the key to the procedural legitimation of law” (Nederman 1995: 77). What is noteworthy about that procedure is that the *discovery* of law is attributed to those who have legal expertise and prudence, while the *authorization* of law is subject to the consent of the whole citizen body. Likewise, consent is at the heart of Cusa's ecclesiological system. Consent of the faithful constitutes the basis of both ecclesiastical authority and the making of law (Sigmund 1963: 137–157). Indeed, the primacy of Peter is not solely dependent on Christ's commission but also on the consent of the apostles (Nicholas of Cusa 1991: 112).

Clearly the idea of consent was enshrined in medieval political theory and practice. Some modern commentators, who underline the historical significance of the medieval development of the idea of consent, go so far as to downplay the differences between medieval and early modern views of consent (Tierney 1982: 29–52). However, if we examine some principal ideas that define the process by which consent is secured, it becomes apparent that the medieval concept of consent is not identical to its modern counterpart.

What Touches All Must Be Approved by All

One of the well-known principles in the medieval doctrine of consent is “*Quod omnes tangit ab omnibus approbari debet*” (What touches all must be approved by all). Ostensibly this principle originating from Roman Law might plausibly be interpreted as the basis of “popular sovereignty,” meaning that the right to make the final decisions in the political community pertains to the people. This argument has been formulated by Ullmann (1970) and Antonio Marongiu (1968a, 1968b). The maxim was adopted widely by both Roman and canon lawyers, popes, emperors, and kings as a normative constitutional principle in and beyond the Middle Ages.

Isolating the maxim from contexts in which it was used, however, entails a serious risk of misinterpreting it. In the original Roman Law context, the text was not a constitutional principle at all; it was typically mentioned as a mere technical principle in private law concerning the administration of a tutelage held by a group of tutors. Constantin Fasolt (1991: 26) characterizes

the consent expressed in the maxim in the context of Roman Law as procedural since it is only a procedural principle that when the rights of a group of individuals are questioned, a judge must make a decision in the presence of all who are touched by it.

In the Middle Ages, the maxim was adapted to the sphere of public law, a significant departure from the ancient Roman tradition. However, what the maxim meant in the medieval context was not that the people were entitled to determine the fate of the community in which they lived; the consent that the people could give to the decision was deemed to be compulsory. “The authorities merely came to be obliged to convoke the people when decisions affecting the common good had to be taken, but they were not . . . subjected to the popular will” (Fasolt 1991: 29). Discussing the adaptation of the maxim to medieval canon law, Kenneth Pennington (2006: 30) explains that when the maxim was referred to in the context of the rules regulating the summoning of a council, what it meant was that “any council should invite persons who were not normally present in the deliberations of the council when it dealt with matters touching their interests.” Since it was compulsory for those invited to give consent, the maxim “What touches all etc” in the medieval context did not lose the ancient Roman procedural meaning. In entailing the procedural sense, the maxim resembles the aforementioned idea of *plena potestas* (Post 1964: 91–162).

Majoritarian Principle

If the maxim “What touches all etc” embodies the procedural principle that everyone concerned must be summoned and consulted, what is the criteria by which to decide whether the consent of everyone—individually or collectively—is given? Medieval political thinkers generally preferred unanimity. Marsilius proposed “virtual public consensus regarding matters of common concern” (Nederman 1995: 75), and Cusa assumed tacit consent of the multitude to the electoral or legislative decision of the wise (Sigmund 1963: 153). But what if a collective decision-making process fails to reach a unanimous decision?

The majoritarian principle is taken for granted as a decision-making procedure in modern democratic societies; however, the history of the majoritarian principle, which remains under-researched, is difficult to penetrate (Burns 2003). In practice, the majoritarian principle was adopted in ecclesiastical elections and decision-making processes in urban communities (Moulin 1953; Black 1984: 61). In theory, there were two seminal concepts of majoritarianism in the Middle Ages: one is *maior et sanior pars* and the other is *valentior pars*. The former—*maior et sanior pars*—may be translated “a greater and wiser part,” which consists of two elements: “greater” and “wiser.” The “greater” could be either a quantitative or a qualitative concept: on the one hand, it might be possible to interpret *maior pars* as a numerical majority whose decision carries weight either because of the voluntary acquiescence of the minority or because of the recognition of the need to submit to the ultimately irresistible force of numbers. Indeed, the electoral process within the medieval church often adopted the principle that two-thirds of the entire number of votes determined the outcome of the election. On the other hand, the medieval concept of *majoritas* is conceptually associated with authority no less than with numbers. The qualitative interpretation of *maior* is consistent with the addition of *et sanior*. Attributing decision-making authority to the “wiser part” underscores the quality of the decision, not the numerical extent of support given for the decision. The idea that the prudence of a decision is inherent in the majority view did not gain support—and indeed found resistance—in the Middle Ages (Burns 2003). The ambivalence of the idea of *maior et sanior pars* is clearly seen in how medieval canonists theorized the principle of ecclesiastical election. The early thirteenth-century decretist Johannes Teutonicus advocated a clear numerical majority, while the contemporary decretalist Bernardus Parmensis and Pope Gregory IX rejected the majoritarian interpretation of *maior et sanior pars* (Pennington 2006: 26).

The idea of *valentior pars*, typically translated as the “weightier part,” is often seen as the root of the medieval origin of majoritarian rule. Marsilius of Padua maintains famously in the *Defender of the Peace* that the legislative power consists in the entire body of the citizens (*universitas civium*) or in its *valentior pars*. Marsilius, however, notes explicitly that in referring to *valentior pars* he has in mind “both the quantity and the quality of persons in the community upon which the law is passed” (Marsilius of Padua 2005: 67). Prudence and expert knowledge, not merely the number of votes, carry weight in his conception of *valentior pars*.

Cusa inherits the Marsilian concept without clarifying whether it is a numerical or qualitative concept; however, in the section of *The Catholic Concordance* where the influence of Marsilius is manifest, Cusa insists that “certain wise men act as guides for the unthinking people” (Nicholas of Cusa 1991: 207). Likewise, when Cusa discusses the question who should be allowed to sign and consent to a doctrinal definition made by the council, he presents a case that not only bishops but also abbots and monks should be included; however, Cusa does not fail to add that

where a decision is made not by unanimity but by majority vote, discretion and prudence and authority ought rightly to lead us to consider whether the judgment of fools whose outnumber is infinite might not outweigh the votes of the wise.

(Nicholas of Cusa 1991: 106)

Individual Autonomy

The history of the majoritarian principle in the Middle Ages suggests that while the principle found application in the public decision-making process, its theoretical justification met persistent resistance. Indeed, Ockham (1997: 281–282, 1998: 71–72), Marsilius’s contemporary, writes:

I consider that what the many allege, that one should not go against the multitude, smacks clearly of heresy; since it is more commonly the multitude that was in error, and we read in holy scripture that not seldom it was one man alone who escaped all the rest.

But majoritarianism is not democracy. Indeed, R.H. Tawney (1962: 271) maintains: “the foundation of democracy is the sense of spiritual independence which nerves the individual to stand alone against the powers of this world.” If so, a “democratic” aspiration is to be found in Ockham.

Ockham’s polemical writings, which attacked the heresy of contemporary popes, are permeated with the powerful sense of individual autonomy. Before the final quarter of the twentieth century, his emphasis on the individual was typically seen as a derivative of his nominalism (de Lagarde 1932–1946; *ibid.*: 1956–1970; Wilks 1963). More recent scholarship examines Ockham’s political works in their own right to reveal that his vindication of dissent from a heretical pope is predicated on the superiority of the cognitive authority of an individual’s correct knowledge of the Christian faith against the institutional authority of ecclesiastical office holders whose doctrinal knowledge is erroneous (Shogimen 2007: 118–123).

Ockham’s micro-theory of individual political action is also underpinned by the idea of the individual as an agent of “rights and liberties granted by God and nature.” The violation of individual rights and liberties negates the legitimacy of the power that was exercised, thus legitimating dissent on the part of violated individuals. The morality of dissenting individuals is also anchored in the negative authority of individual conscience: acting against the dictates of conscience is always wrong (Shogimen 2007: 131–135). Ockham’s individualist program of ecclesiastical dissent is markedly different from other “democratic” political ideas in the Middle Ages, which typically pointed to collective decision-making process.

Conclusion

Taking a cue from Umberto Eco, Francis Oakley argues that it was “the Latin Middle Ages” that “turned us into western *political* animals” (Oakley 2012: 149). Nowhere else but in the West did government practices and constitutional arrangements of representation emerge, and it was representative mechanisms, Oakley maintains, that laid the foundation for liberal democratic and constitutional systems of government, which flourished in western Europe from the late eighteenth century and in the rest of the world from the second half of the twentieth century. The idea of representation, along with that of consent, emerged in the Latin Middle Ages and evolved ceaselessly through the centuries in the western tradition of political thought. However, as Oakley (2012: 157) also notes, the medieval ideas of consent and representation are conceptually not identical to their modern counterparts. While terms such as “representation” and “consent” were in continuous use by political thinkers of different generations, their meanings changed over time. The exploration of the medieval theories of representation and consent reminds us that one of the challenges for the historians of political thought is to uncover *conceptual* changes beneath the ostensible *linguistic* stability in the continuous use of the same vocabulary.

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INDEX

Note: Page numbers followed by “n” denote endnotes.

- Abbas, Haly 244
- Abelard, Peter 7, 8, 12, 14, 15n18, 16n34–35, 24, 39, 47, 49, 98, 105, 128, 129, 131, 132, 134, 136n9, 141, 150–152, 185, 232, 293, 309, 318–320, 338, 363, 366, 372n25; commentary on Romans 367–368; *Dialectica* 39, 98, 134; *Logica Ingredientibus* 39, 42n5; *Logic for Beginners* 150
- abstraction: in early medieval philosophy 292–293; illumination *vs.* 292; nominalist theories 296–297; in thirteenth-century Aristotelianism 293–296; universals 291–292
- abstractive cognition 273; *see also* abstraction
- accidental change 79–81, 92–94, 196–200
- accidental forms 81, 84, 87–89, 92–94, 111, 176, 194, 197–199, 200n4, 273
- accidental sameness *see* accidental unities
- accidental unities 81, 87, 93, 94, 129, 133
- act of intellection 225, 228, 229, 238, 249, 254, 256, 257, 258, 259, 283, 284, 285, 286, 295, 310
- acts of reasoning 31, 33, 34, 38, 39, 40, 72–73, 161, 170, 173, 260, 267, 280, 301, 336, 343, 355, 358, 399
- acts of thinking 6, 10, 110, 118–119, 216, 217, 219, 222n6, 229, 258, 280–281, 284, 287–288; ontological status of 285–286
- acts of willing 113, 119, 218, 220, 235, 318, 322–328
- actus virtuosus* 346
- Adams, M. 84, 105, 119, 120, 123n44, 128, 129, 130, 147n19, 163, 171, 182n5, 200n6, 200n10, 333n73, 351n10
- agent intellect 113, 216, 217, 222n5, 228, 229, 251, 292, 294, 296, 301, 309
- AGM theory of belief revision 73
- Ailly, Peter 225, 230, 287, 309, 310, 311, 312, 313n15, 345, 348, 349, 350, 352n25–352n31
- Albert of Saxony 12, 132, 134, 136n10, 136n12, 311
- Albert the Great 23, 37, 98, 99, 105, 152, 233, 234, 243, 254, 256–258, 271, 273, 274, 311, 322–323, 324, 332n20, 339–341; *Quaestiones* 136n10; *Sententia de anima* 271; *Summa de homine* 233, 271
- Alexander of Aphrodisias 228, 230, 293
- Alexander of Hales 233, 368, 384
- Alighieri, Dante: *De Monarchia* 387, 394, 399; *Inferno* 394
- Alnwick, William 185
- Ammonius 15n13
- anachronism 2
- Andrew of Neufchateau 345, 349–350, 353n37
- Anselm (of Canterbury) 150, 203–206, 211n2, 211n9, 227, 232, 317, 318, 319, 321, 329, 330, 331n4, 337, 338, 359, 371n20–371n23, 372n24; account of the atonement 366–367; critique 365–366; *Cur Deus Homo* 365–367, 371n22; medieval atonement theory 363–365
- Anselmian notion of satisfaction 366–367, 369
- Anselm of Laon 243
- Apuleius 6
- Aquinas, Thomas 2, 7–10, 16n29, 80–83, 104, 107–112, 114, 118, 121n5, 129, 136n11, 146n15, 152–155, 162, 173, 175, 176, 196, 198, 200n4, 207–211, 211n16, 219–222, 222n6, 223n15–223n17, 228–230, 242, 243, 245, 246, 252–253, 256, 258–260, 269, 272, 273, 276, 277n28, 285, 288, 291, 293–297, 300, 302, 303, 309–310, 322–326, 328, 332n32, 339–341, 357–359, 361, 362, 369, 370, 372n35–37, 372n50, 379, 381, 382, 384, 387, 388, 394, 398; Aristotelian synthesis of 234–236; *Commentary on De Anima* 272; *Commentary on the Nicomachean Ethics* 358; epistemological objection 204; *Exposition on Boethius's On the Trinity* 152; metaphysical objection 205; *On Being and Essence* 146n15, 293; on natural

- and violent motions 164–165; *On the Unity of the Intellect against the Averroists* 222n6, 229; *Quaestiones Disputatae de Anima* 110, 238; *Summa Contra Gentiles* 206; *Summa Theologiae* 108ff, 121n5, 207, 223n17, 234–236, 272, 284–285, 305n2, 313n24, 325, 372n36, 372nn38–49; *Summa Theologica* 122n15
- Arabic Aristotelianism 275; *see also* Siger of Brabant
- Aristotelian hylomorphism 184, 199, 302; *see also* hylomorphism
- Aristotelianism 13, 86–88, 92, 195, 227–229, 231, 292, 294
- Aristotelian place 178–181
- “Aristotelian revolution” thesis (Ullmann) 403
- Aristotelian syllogistic theory 35–38, 45–48; *see also* syllogisms
- Aristotelian synthesis of Thomas Aquinas 231, 234–236, 310, 394
- Aristotelian theory of reduplication 21–28
- Aristotelian tradition 26–29, 176, 185, 268
- Aristotle 54, 130, 162–163, 165, 220, 269, 276n16, 320, 331, 336; *Categories* 44, 96, 97, 100, 141, 146n3, 223n16; *De Anima* 215–216, 222n7, 226, 228–230, 244, 268, 270, 275, 293, 306, 309; *De Interpretatione* 6, 7, 9, 16n28, 321; free decision and early reception of 321–322; *On Coming to Be and Passing Away* 185, 188, 189, 293; *On Interpretation* 21, 44; on senses and their objects 266; *On the Heavens* 172, 185–186; *Metaphysics* 96, 97, 116, 126, 129, 132, 133, 168; *Nicomachean Ethics* 320–321, 336, 339; *Organon* 44; *Peri hermeneias* 6, 306, 308; *Physics* 126, 127, 166–168, 178, 185, 188, 189, 192, 207, 245, 321; *Politics* I 398; *Posterior Analytics* 25, 31, 33, 44, 50; *Prior Analytics* 20, 23, 35, 37, 44, 50, 55n4; *Sophistical Refutations* 21, 34, 47, 136n1; *Topics* 31, 32, 34, 38, 40, 49, 71, 126, 127, 132, 219
- Arlig, A. 128, 131, 132, 134, 146n8
- Armstrong, David 131
- Ars Burana* 12
- Art and Science of Logic* (Roger Bacon) 32–35; *see also* Bacon, Roger
- Asher, N. 29
- Ashworth, E. J. 16n39, 66, 71, 72, 74, 307, 311, 312n5
- assertoric copulas 16n36, 44
- assertoric proposition 45–47
- assertoric syllogisms 35–37, 45, 48, 54; *see also* syllogisms
- atomism 184; continuity and measure 185–187; finitism 188–189; *On Indivisible Lines* 187–188; potential and actual parts 189–192
- atonement: Abelard’s commentary on Romans 367–368; Anselm’s account of the atonement 366–367; Anselm’s critique 365–366; developments 368–370; medieval atonement theory before Anselm 363–365
- attentive/inattentive consciousness distinction 250; *see also* consciousness
- Augustine of Hippo 44, 50, 225–229, 231–236, 243, 254, 255, 266, 267–269, 275, 283, 291–292, 306, 307, 309, 310, 318–320, 327, 329, 331, 336–337, 339, 364, 370, 371n21, 380, 395, 396; *Literal Commentary on Genesis* 268; *On the City of God* 243, 380, 394–396, 401n1, 401n2; *On the Free Choice of the Will* 267, 276n4; *De Trinitate* (On the Trinity) 15n16, 227, 268–269, 255, 292, 306, 307, 313n8, 313n10, 313n11
- Augustinian tradition 51, 226–228, 229–230, 231–234, 237, 265, 268–269, 292, 307–309, 325, 382, 390, 394
- Auriol, Peter 99, 104, 155, 252, 260, 285, 287
- Averroes 130, 131, 151, 153, 216, 222n3, 265, 266–267, 270–272, 292, 296; clarity of style 228; *Long Commentary on De anima* 253, 269
- Averroist scheme of internal mental powers 275
- Avicenna 21, 23, 28, 144, 145, 146n16, 151, 152, 191, 244, 245, 253–255, 265–267, 271–272, 275, 277n44, 292–293, 325; *see also* Ibn Sīnā
- axiom of containment 181–182
- “Babylonian Captivity” 389
- Bacon, Roger 33, 34, 41, 152, 308; *Art and Science of Logic* 32–35
- “Barbara” (syllogism) 36, 46, 47, 55
- Bartlett, A. 161, 371n3
- “being *qua* being” 20, 26
- Bercken, J. H. L. van den 118, 121
- Beretta, B. 105
- Bernard of Clairvaux 232–236, 244, 319–321, 366, 368, 392, 397, 401n10
- Berubé, C. 156
- Billingham, Richard 12–13
- Blund, John 269–271, 277n24
- Boethius, Manlius 6–8, 14n7, 15n8, 15n13, 15n15, 22, 31, 34, 43, 44, 96, 97, 133, 187, 292, 307; *Commentary on the Isagoge* 44, 150; *On the Trinity* 150, 268, 269
- Bonaventure 80, 152, 153, 234, 237, 243, 258, 292, 322–324, 326, 355–357, 359–362, 368; *Collationes in Hexaëmeron* 237
- Bonetus, Nicolas 185; *Small Treatise on Quantity* 191
- bonum ex natura rei* 349
- Bos, E. P. 13, 313nn17–18
- Bosley, R. 146n17, 146n18, 147n19
- Boso 365–366
- Bracciolini, Poggio 184
- Bradwardine, Thomas 185
- Brentano, F. 299, 301
- Brinkley, Richard 11, 13, 71
- Brito, Raldulphus 105
- Brower, J. 94n2, 94n15, 94n16, 94n22, 99, 105, 128, 129, 156
- Brower-Toland, Susan 11, 14, 16n32, 16n38, 99, 105, 128, 129, 156, 253, 254, 256, 257, 258, 259, 260, 260n1, 288, 337

- Brown, C. 84, 371n23
- Brungs, Alexander: *Metaphysik der Sinnlichkeit: das System der Passiones Animaebei Thomas von Aquin* 242
- Buridan, John 7, 8, 15n19, 33, 42n4, 43, 51, 53–54, 120, 126, 132, 134, 135, 136n12, 150, 155, 163, 175, 177, 181, 182, 185, 219–222, 223n18, 223n19, 229, 230, 260, 275–276, 297, 310–312; *Summaries of Dialectic* 33, 40; *Summulae* 35, 44, 48; *Summulae Dialectica* 35, 44, 48; *Treatise on Consequences* 45, 52, 53, 55
- Burleigh, Walter 21, 25, 26; *see also* Burley, Walter
- Burley, Walter 8, 9, 11, 14, 15n14, 15n24, 16n28, 16n33, 16n41, 16n42, 41, 59–67, 71, 73, 89, 105, 134, 150, 177, 196–198, 200n5, 200n7, 270
- Burns, J. H. 392
- Capocci, James 398
- Carraud, V. 105
- Cartesian Demon-scenario 305
- “categorematic terms” 7, 12, 15n14, 309, 311
- Categories* (Aristotle) 44, 96, 97, 100, 223n16
- causality 161; form and matter 163–164; teleology 162–163; texts 164–172
- causal reduplicative propositions 25; *see also* qua proposition
- Cesalli, L. 13, 16n41
- Chatton, Walter 11, 14, 16n26, 16n27, 185, 189, 190, 253, 257
- Chene, Des 84
- “Christendom” 377, 386, 397
- Christian moral theory 336
- The Christian Philosophy of St. Thomas Aquinas* (E. Gilson) 84
- Cicero 184, 243, 340, 407; *Topica* 44
- Clark, D. 342
- Clark, M. 337
- classical theism 86–87
- cognitive acts 280–282, 285–288; disagreement 282–288; efficient cause of 282–284; and intentional being of their objects 302–304; and objects, individuation of 304–305; and their objects 301–304; *see also* acts of intellection; acts of thinking
- Collationes in Hexaëmeron* (Bonaventure) 237; *see also* Bonaventure
- Commentary on De Anima* (Aquinas) 272; *see also* Aquinas
- Commentary on the Isagoge* (Boethius) 44, 150; *see also* Boethius, Manlius
- Commentary on the Nicomachean Ethics* (Aquinas) 358; *see also* Aquinas
- common sense 251, 252, 253, 266–268, 269–270, 275–276, 277n45, 301, 310
- common sensibles 266, 269–270
- Compendium Logicae Porretanum* 133
- complexe significabile 12; *see also* propositions
- complex reism 11; *see also* propositions
- Compotista, Garlandus 146n5
- conceded propositions (in games) 58, 68; *see also* logic games
- concede rule (for games) 58, 59–60, 67; *see also* logic games
- Condemnation of 1277 135, 153, 222n8, 228–230, 237, 326, 332n45, 346
- conscience 338, 349–350, 354–362, 410
- consciousness: phenomenality, subjectivity 260; and physicalism 260; scholastic debates on 249–252; in scholasticism 252–260
- Constantinian Christianity 395
- Conti, A. 14, 16n42, 105
- convertibility 100; *see also* syllogisms
- corporate forms 385
- corporeal extension 175, 176–177
- Correctorium fratris Thomae* (William of La Mare) 237; *see also* William of La Mare
- Correctory of Brother Thomas* (William de la Mare) 326; *see also* William of La Mare
- cosmological frame of reference 178–180, 182
- Crathorn, William 11, 185, 189–191, 312
- Cross, R. 84, 94n12, 111, 112, 114, 118, 120, 129, 133, 136n11, 156, 164, 185, 200n9, 252, 253, 259, 260, 284, 285, 288, 372n35
- Cur Deus Homo* (Anselm) 365–367, 371n22; *see also* Anselm
- Damascus, John 79–80, 235, 321–322, 331n15; *De fide orthodoxa* 234, 321
- De Anima* (Aristotle) 215, 216, 222n7, 226, 228–230, 244, 268, 270, 275, 293, 306, 309; *see also* Aristotle
- decision-making process 337, 407, 409, 410
- De consequentia* literature 40
- De Ecclesiastica Potestate* (Giles of Rome) 393n15, 398, 399; *see also* Giles of Rome
- De fide orthodoxa* (John of Damascus) 234, 321; *see also* Damascus, John
- degrees of attention 250
- De Interpretatione* (Aristotle) 6, 7, 9, 16n28, 21, 44, 321; *see also* Aristotle; *On Interpretation*; *Peri hermeneias*
- De Monarchia* (Dante) 387, 394, 399; *see also* Dante
- demonstration *quia, propter quid* 33
- demonstrative arguments 32–33
- demonstrative syllogism 32
- denied propositions (in games) 58; *see also* logic games
- de obligationibus* 40, 57; *see also* logic games
- depositio game 58; *see also* logic games
- De Potestate Regia et Papali* (John of Paris) 399; *see also* John of Paris
- De Regimine Christiano* (James of Viterbo) 398, 399; *see also* James of Viterbo
- De Regimine Principium* (Giles of Rome) 398; *see also* Giles of Rome
- De Regno* (Aquinas) 397, 398; *see also* Aquinas
- De Renunciatione Papae* (Giles of Rome) 398; *see also* Giles of Rome

- De Rerum Natura* (Lucretius) 184, 187; *On the Nature of Things* 184; *see also* Lucretius
- De Rijk, L. M. 71–72; *logica modernorum* 2, 22, 23, 44
- De Sacramentis* (Hugh of St. Victor) 331n11, 396, 401n6; *see also* Hugh of St. Victor
- Descartes 79, 215, 222, 230, 312
- De Trinitate* (Augustine of Hippo) 15n16, 227, 268–269, 255, 292, 306, 307, 313n8, 313n10, 313n11; *see also* Augustine of Hippo
- development of logic games 71–72; *see also* logic games
- diachronic numerical sameness 135; *see also* identity
- Dialectica* (Abelard) 39, 98, 134; *see also* Abelard
- dialectical arguments 32, 33–34, 38, 39
- dialectical grounds 39
- dialectical syllogism 32, 33, 35
- Dialectica Monacensis* 23
- Dialogue on Natural Philosophy* (William of Conches) 185; *see also* William of Conches
- dicta* 12; *see also* propositions
- dictamen rectae rationis* 350
- dictum propositionis* 12; *see also dicta*; propositions
- didactic disputation 40
- Dihle, A. 231
- dispositions *see* powers
- Le Discours intérieur* (C. Panaccio) 306; *see also* Panaccio, C.
- “disputations of obligation” 57; *see also* logic games
- diversity of attitudes 155
- divine command theory 345–351
- Divine Institutes* (Lactantius) 395; *see also* Lactantius
- doubted propositions (in games) 58; *see also* logic games
- dubitatio* game 58, 64; *see also* logic games
- Dumont, Stephen 130, 200n5, 200n7, 239, 332n44
- Durand of Saint-Pourcain 155, 283, 285, 287, 288
- Dutilh Novaes, C. 15n21, 16n40, 41, 43, 44, 55n6, 59, 64, 67, 71–74
- Early Middle Ages 150, 154, 156, 242–244
- Eisagoge* (Porphyry) 21; *see also* Isagoge (Porphyry)
- Embry, B. 121
- Emotion and Cognitive Life in Medieval and Early Modern Philosophy* (Pickavé & Shapiro) 242
- emotions: early Middle Ages 242–244; high scholasticism 244–246; late Middle Ages 246–247
- Emotions in Ancient and Medieval Philosophy* (S. Knuuttila) 242
- Empiricist theories (of self-consciousness) 259, 260; *see also* consciousness
- enthymemes 38, 39, 41
- “*enuntiatio*” 15n8; *see also dicta*; propositions
- Epicurus 185, 188–190; *Letter to Herodotus* 184
- “epiphenomenalist” approach (to qualitative change) 195; *see also* qualitative change
- equivalent propositions 51
- Erismann, C. 105
- Eriugena, John Scotus 150
- esseintentionale* 299, 303–304
- “essentialism” 134, 143
- essentialist modalities 49–50; *see also* modal logic
- essential properties 88, 89, 94, 181, 220, 250
- “estimative faculty” 266–268, 271–275; *see also* internal senses
- Exigit Ordo* 191
- experience-based knowledge 348
- “the *exponibilia*” 20
- Exposition on Boethius’s On the Trinity* (Aquinas) 152; *see also* Aquinas
- expository syllogism 37; *see also* syllogisms
- extended syllogism 37; *see also* syllogisms
- “extrinsic denomination” 307
- Fine, Kit 29
- finitism (and divisibility) 188–189, 191; *see also* atomism
- Fland, Robert 59, 71
- Fonseca, Pedro da 156
- “form of corporeity” 82, 83, 223n11, 223n13; *see also* forms
- “form of metal” 223n17; *see also* forms
- forms 86–87; individualized 89; matter and 87, 163–164; motivations 90–94; pluralism *vs.* unitarianism about substantial 89–90; substantial and accidental 87–89; *see also* hylomorphism
- Forrester, Kevin Thew 371n1
- Fortescue, Sir John 379
- Francis of Meyronnes 155
- “free appetite” 327, 329; *see also* freedom
- free decision 318, 321–323, 327; definitions of 317–320; psychological foundation of 320–329; *see also* freedom
- freedom: of choice 236, 317, 323, 324, 337; definitions of free decision 317–320; of divine action 346; nature and will 329–330; psychological foundation of free decision 320–329
- “freedom of the will” 238, 327, 328; *see also* freedom, free decision
- “free will” 233, 317, 320, 323, 330, 331, 331n1, 350; *see also* freedom, free decision
- Friedman, R. 121, 286, 287
- Gaetanus of Thiene 33
- Galen 265
- games 57–59; development of 71–72; obligational 73; *positio* 59–71; *see also* logic games
- Geach, Peter 131, 132
- Gelasian doctrine 396
- geometric atomism 185, 186, 190, 191

- Gerard of Odo 185, 189–191
 Gerson, Jean 247, 345, 350
 Gervasius of Waim: *Tractatus noticiarum* 311
 Al-Ghazali 191
 Gibbard, Allan 128
 Giles of Rome 128, 136n3, 154, 155, 179,
 180, 182n13, 196, 197, 200n4, 284, 286, 326, 327,
 329, 332n41, 383, 390, 392, 394, 398, 399, 400,
 401n16, 404, 408; *De Ecclesiastica Potestate* 398,
 399; *De Regimine Principum* 398; *De Renunciacione*
Papae 398
 Gilson, E.: *The Christian Philosophy of St. Thomas*
Aquinas 84
 Godfrey of Fontaines 128, 153, 196, 197, 200n5,
 237, 238, 282, 285, 288, 328–329, 332n49,
 333n50–57
 God's existence, proofs for 202–211
 Gonsalvus of Spain 238
 Gratian, Johannes 397
 Gregory of Rimini 12, 16n35, 185, 307
 Grellard, Christophe 192
 Grensted, L. W. 366, 371n19
 Grosseteste, Robert 179, 182n12, 185–189, 321;
Notes on the Physics 186

 “habit of prudence” 360, 361
 “habitual cognition” 198, 256, 274, 275, 292, 296,
 359–361
haecceitas 154–156
 Hansen, H. 105
 Henninger, M. 122n23, 123n35, 103–105
 Henry of Bracton 381, 389
 Henry of Ghent 102–105, 107, 111–116, 119, 120,
 121n15, 122n15, 122n17, 122n22, 122n23, 127,
 128, 153, 196, 198, 237, 273, 274, 284, 286, 287,
 292, 326–329, 332n45, 342, 359
 Henry of Harclay 104, 155, 185–192
 Heyer, Gerhard 29
 “hierocratic” model (of power) 396
 “hierocratic papalism” 398
 higher-order theories (of consciousness) 256,
 257, 259
 high scholasticism 244–246
 Hirvonen, Vesa 242, 246; *see also Passions in William*
Ockham's Philosophical Psychology
 Hobbes, Thomas 312, 381, 383, 388
 Holcot, Robert 14
 al-Hudhayl, Abū 184
 Hugh of St. Victor 233, 320, 331n11, 396, 401n6;
De Sacramentis 331n11, 396, 401n6
 human substantial form 80, 88–89, 89–90, 92, 107,
 108–109, 112, 119, 215f, 219–220
 human will: goodness of 341; self-determination
 and freedom of 337, 342
 hylomorphism 91–94, 215, 217
 hylomorphist cognitive psychology 215ff, 219–220,
 227–230, 302
 Hyman, A. 392

 “hyper-externalist” conception of intentionality
 304, 305n3
 “hypothetical syllogisms” 38, 40

 Ibn Gabirol, Solomon (Avicbron) 222n10
 Ibn Rushd (Averroes) 151, 228, 265; *see also Averroes*
 Ibn Sinā (Avicenna) 144, 151, 228, 244, 253, 265;
see also Avicenna
 identity: comparing *identitas* to 129–130;
 constitution and persistence 130–135
 “imperfect cogitations” 252
impositio game 59; *see also* logic games
 impredicability 148, 150
 inattentive consciousness 254, 256–258
 incommunicability 148, 150, 152, 153; *see also*
 individuality
 indiscernibility of identicals 91, 93, 126–127; *see*
also identity
 individuality 148–156; senses of 149; standard
 theory of 152; *see also* individuation
 individualized forms 89
 individuation 148–156; principle of 151, 154, 155;
 problem of 148–150, 153
 indivisibility 130, 148, 154, 155; *see also*
 individuation
Inferno (Dante) 394; *see also* Dante
 inner-acquaintance theories (of consciousness) 257;
see also consciousness
insolubilia 34; *see also* sophistical syllogism
 intellect: Aristotelianism 227–229; Augustine
 226–227; later Middle Ages 229–230; two
 paradigms 225–226
 intellectual acts 283–286
 intellectual determinism 326–329
 “intellectual powers” 107ff, 215ff, 271–274, 280ff
 intentionality 271–274, 299–301; cognitive acts and
 their objects 301–305; semantic redefining of
 309–311
 “intentionally distinct” 127; *see also* identity
 internal senses 265ff; in later Middle Ages 268–294;
 origins and background 265–268; *see also*
 common sense
 intrinsic-reflexivity theories (of consciousness)
 256–257; *see also* consciousness
Introductiones in logicam (William of Sherwood) 22,
 29, 32, 34–36, 38–39, 41n3, 48–49, 55n2; *see also*
 William of Sherwood
 inward-turn theories (of consciousness) 258; *see also*
 consciousness
Isagoge (Porphyry) 44; *see also* Eisagoge

 James of Venice 34
 James of Viterbo 153, 282, 283, 288, 398; *De*
Regimine Christiano 399
 Jan Hus 400
 John of Holland 71
 John of Jandun 216–217, 221, 222n7, 228
 John of la Rochelle 245

- John of Morrovalle 329
 John of Paris (Jean Quidort) 398, 399, 408; *De Potestate Regia et Papali* 399; *see also* Quidort, Jean
 John of Pouilly 329
 John of Salisbury 394, 396; *Policraticus* 396
 John of Turrecremata 383, 390, 393n16
jus gentium 378, 384, 385
- Kahn, Charles 231
 Keffer, H. 74
 Kent, Bonnie 238, 331n4, 332n35
 Kilvington, Richard: *Sophismata* 34, 71
 Kilwardby, Richard 23; *On the Order of the Sciences* 34; *see also* Robert Kilwardby
 Kilwardby, Robert 34–35, 37, 42n6, 49–50, 105, 311
 kinds of argument: form of 35–40; goal or purpose 40–41; outcome of 32–35
 King, P. 14, 15n22, 42n5, 156
Klassische Emotionstheorien: Von Plato bis Wittgenstein (Landweer & Renz) 242
 Klima, Gyula 14, 15n19, 94n1, 146n15, 293, 295, 297, 305n3
 Knuuttila, Simo 44, 48, 50, 51, 242, 245, 246, 247, 296; *Emotions in Ancient and Medieval Philosophy* 242
 Krempel, A. 105
 Kretzmann, N. 13, 14n3, 22, 72, 136n10, 295
 Kronen, John 85n1
- Lactantius 184, 395; *Divine Institutes* 395
 Lagerlund, H. 72–73, 84
 Lambert: *Logica* 48
 Landman, F. 29
 Landweer, Hilge: *Klassische Emotionstheorien: Von Plato bis Wittgenstein* 242
 Langdon Forhan, K. 392
 language and cognition 6–7; *see also* mental language; mental proposition; propositions
 Late Middle Ages: emotions 246–247; intellect 229–230; internal senses in 268–294
 “Latin Averroism” 228, 237; *see also* Arabic Aristotelianism; Aristotelianism; radical Aristotelianism
 Lavenham, Richard 71
 law and government: contests of power 385–391; custom 377–380; medieval political thought 377; rights, property, and obligation 380–385
 Lawton, Hugh 312
 Leibniz, G. 2, 29, 127, 129, 312
 Lenz, Martin 306, 312n4
 Lerner, R. 392
Letter to Herodotus (Epicurus) 184; *see also* *Lives of the Philosophers*
 Lewis, Ewart 378, 389
lex Christi 400; *see also* spheres of power
lex obligatoria 348; *see also* spheres of power
 liberal democracies, political culture of 391
Liber de anima (Ibn Sinā) 253; *see also* Ibn Sinā
Liber de causis (Anonymous) 251, 253
Liber Pantegni (Constantine the African) 244
liberum arbitrium 232–235, 238, 317, 319, 320, 321, 323, 326, 336, 339, 340; *see also* free decision; freedom
Literal Commentary on Genesis (Augustine of Hippo) 268; *see also* Augustine of Hippo
Lives of the Philosophers (Diogenes of Laertius) 184; *see also* *Letter to Herodotus*
 Locke, John 79, 85n1, 200n3, 305, 312, 388
Logica (Lambert) 48; *see also* Lambert
Logica Ingredientibus (Abelard) 39, 42n5; *see also* Abelard
logica modernorum (De Rijk) 12, 22, 23, 44; *see also* De Rijk
logicavetus (old logic) 21, 44
Logic for Beginners (Abelard) 150; *see also* Abelard
 logic games: development of games 71–72; games 57–59; interpreting 72–74; *positio* game 59–71; *see also* obligational games
logos endiathetos 307, 311
 Lombard, Peter 161, 230, 233, 234, 243, 320, 321, 331n10, 331n12, 354, 366; *Sentences* 161, 354, 366, 398
Long Commentary on De Anima (Averroes) 253, 269; *see also* Averroes
 Lucretius 189; *De Rerum Natura* 187; *On the Nature of Things* 184
 Luther, Martin 361
 Löwe, C. L. 121
- Macfarland, J. 392
 Macken, R. 122n22
Magister Abstractionum 28
 “magisterial proposition” 327
 Mahdi, M. 392
 Maier, A. 200n2
 Maimonides 151, 185
 Major, John 135
 Mare, William de la: *Correctorium fratris Thomae* 237; *Correctory of Brother Thomas* 326; *see also* William of la Mare
 Marenbon, J. 105, 146n5, 232, 249, 260, 293
 Maritain, J. 84
 Marmo, C. 105
 Marsilius of Padua 383, 387, 389, 394, 399, 401, 405, 410
 Martin, C. 39, 72, 105, 134, 256, 258, 260
 Mastri, Bartolomeo 156
 Material Constitution 90–91, 128
 matter 79–84; and forms 87, 163–164; prime 79, 80–84, 87; proximate 87; spiritual 222n10; *see also* hylomorphism
 Matthew of Aquasparta 256, 258
 Medieval Aristotelians 79, 88–90, 94, 217, 221, 302; *see also* Aristotelianism, hylomorphism
 medieval atonement theory 363–365
 medieval logicians 22, 24, 27, 29, 36, 38, 48, 72, 126

- medieval modal logic (background) 47–48
 medieval political thought 377, 378, 380, 383, 387, 391, 397, 403, 405
 Mendoza, Pedro Hurtado de 156
 Menssen, Sandra 85n1
 mental language 309, 311; scope, discussions, and questions 311–312; semantic redefining of intentionality 309–311; from word to language 307–309
 mental propositions 6–13, 15n20; signification of 10–13; *see also* mental language
Metaphysics (Aristotle) 96, 97, 116, 126, 129, 132, 133, 146n14, 165, 168, 325, 329; *see also* Aristotle
Metaphysik der Sinnlichkeit: das System der Passiones Animae bei Thomas von Aquin (Alexander Brungs) 242
 “the metrical paradox of extension” 188
 Mignucci, Mario 127
 “mind-body problem” 215
 “Mirror for Princes” treatise 398
 modal expressions 55n3; relationships between 51–52; *see also* modal logic
 modalities as alternatives 50–51; *see also* modal logic
 modal logic: background and motivations 43–44; interpreting modal operators 48–51; medieval modal logic background 47–48; quantifier, subject, copula, predicate 44–47; systems of 51–55
 modal octagon 53; *see also* modal logic
 modal operators, interpreting 48–51; *see also* modal logic
 modal propositions 47, 53, 55; *see also* modal logic
 modal syllogisms 37, 48, 51, 53–55; *see also* modal logic
 model-reduction operations (in belief systems) 74; *see also* logic games
 modern multi-agent interpretations (of games) 73–74; *see also* logic games
 modern political culture 382; *see also* liberal democracies
 modern political thought 381, 382, 403
 modern single-agent interpretations (of games) 72–73; *see also* logic games
 modism 12, 13
 Molière 117
 Monte, Giambattista da 199, 200n11
 Muller, J. 337, 338, 342

 Natalis, Hervaeus 154, 155, 299–304, 305n1
 natural law 339, 346, 349, 350, 355, 378–380, 383–385, 391, 400, 407
 natural will 235, 342; *see also* freedom; will
 nature and will 329–330; *see also* freedom, will
 al-Nazzām, Abū 184
 necessary accidents 88, 109, 140, 219
 Nederman, C. 392, 405–409
 “negative reduplicative” 25; *see also* qua proposition, qualification

 Nemeseius of Ephesus 321
 Neoplatonism 151, 243, 337, 382, 391, 394, 399
 Nicholas of Cusa 388, 404
 Nicolas of Autrecourt 185, 191, 192
Nicomachean Ethics (Aristotle) 320–321, 336, 339; *see also* Aristotle
 Nicomachus of Gerasa: *On Arithmetic* 185, 187
 nihilism 10, 11, 16n41
 Nominales 134
 nominalist theories of abstraction 296–297
 non-causal reduplicative propositions 25; *see also* qua proposition; qualification; reduplication
 non-conscious self-knowing 254–256; *see also* consciousness; inattentive consciousness
 “non-entitism” 190
 non-syllogistic arguments 34, 38–39
 non-syllogistic reasoning 31
 Noone, T. 252, 292, 333n65, 342
Notes on the Physics (Grosseteste) 186; *see also* Grosseteste, Robert
 no-transfer principle 135
 Nuchelmans, G. 13, 14n5, 15n13, 16n39
 “numerical sameness without identity” 129
 Nussbaum, Martha 242, 246

 “objective being” 144, 145
 obligational games 34, 40–41, 57, 67, 71–74, 167; *see also* logic games
obligationes 34, 40, 57, 59, 67; *see also* logic games; obligational games
 obligations (moral) 345, 348–349, 380–385
 Olivi, Peter John 217–221, 222n9, 223n11–223n13, 237, 238, 239, 252, 253, 254, 256, 257, 258, 259, 274–275, 277n35–39, 283, 285, 287, 288, 310, 342
 Olsson, E. 73
On Arithmetic (Nicomachus of Gerasa) 185, 187
On Being and Essence (Aquinas) 146n15, 293; *see also* Aquinas
On Coming to Be and Passing Away (Aristotle) 185, 188, 189, 293; *see also* Aristotle
 O’Neill, J. 84
On Indivisible Lines (pseudo-Aristotelian) 187–188
On Interpretation (Aristotle) 21, 44; *see also* Aristotle; *De Interpretatione*; *Peri hermeneias*
On the City of God (Augustine of Hippo) 243, 380, 394–396, 401n1, 401n2; *see also* Augustine of Hippo
On the Free Choice of the Will (Augustine of Hippo) 267, 276n4; *see also* Augustine of Hippo
On the Heavens (Aristotle) 172, 185–186; *see also* Aristotle
On the Intellectual Soul (Siger of Brabant) 217; *see also* Siger of Brabant
On the Nature of Things (Lucretius) 184; *see also* Lucretius
On the Order of the Sciences (Robert Kilwardby) 34; *see also* Kilwardby, Robert

- On the Principle of Individuation* (attributed to Aquinas) 153
On the Trinity (Boethius) 150, 268, 269; *see also* Boethius, *De Trinitate* (Boethius)
On the Unity of the Intellect against the Averroists (Aquinas) 222n6, 229; *see also* Aquinas
 “ontological arguments” (for the existence of God) 203
oratio 6, 14n7, 15n8; *see also dicta*; “*enuntiatio*”; propositions
 Oresme, Nicole 12, 134, 135, 164, 172–173, 199, 276, 277n44
Organon (Aristotle) 44; *see also* Aristotle
 Osborne, T. 343
- Paasch, JT 114, 118, 120, 121, 123n44
 Panaccio, C. 14, 15n21, 312, 312n2; *Le Discours intérieur* 306, 313n20
 Parens, J. 392
Parmenides (Plato) 29; *see also* Plato
Parva naturalia 265, 276n9
 Pasnau, Robert 1, 84, 94n2, 94n17, 111, 120, 132, 135, 136n11, 136n12, 200n1, 200n4, 200n6, 222n1, 222n9, 223n15, 223n17, 246, 253, 258, 259, 277n1, 283, 292, 293, 294, 295, 332n32
passiones animae 242, 243ff, 285, 288, 297, 306, 310
Passions in William Ockham’s Philosophical Psychology (Vesa Hirvonen) 242
 Paul of Gelria: *Treatise on Concepts* 309, 313n18
 Paul of Venice 71, 72
Per accidens sequences 208
 “perfect cogitation” 252; *see also* cognitive acts
Peri hermeneias (Aristotle) 6, 306, 308; *see also* Aristotle; *De Interpretatione*; *On Interpretation*
 Perler, Dominik: *Transformationen der Gefühle. Philosophische Emotionstheorien 1270–1670* 242
 Peter of Ailly 225, 230, 287, 309–312, 345, 348–350
 Peter of Spain 21–24, 39, 41, 44–46, 48, 51, 55n2, 55nn7–8; *Summulae Logicales* 44
petitio game 59; *see also* logic games
 Philip the Chancellor 233, 321–322, 331n17, 339, 354, 362; *Summa de bono* 322
Physics (Aristotle) 102, 126, 127, 130, 131, 136n9, 164, 166–168, 178, 182n1, 182n8, 182n15, 185, 188, 189, 192, 207, 245, 321; *see also* Aristotle
 Pickavé, Martin 156, 242, 281, 284; *Emotion and Cognitive Life in Medieval and Early Modern Philosophy* 242
 Pini, Giorgio 16n31, 156, 281, 284, 285, 286, 288
 Plato 86, 87, 97–99, 101–104, 131, 139, 148, 185, 186, 191, 291, 306; *Parmenides* 29
 Platonic Forms 86
 Platonic theory of intellect 227
 Platonism 87, 226
plenitudo potestatis 383
 Poinset, Joao 156
- Policraticus* (John of Salisbury) 396; *see also* John of Salisbury
 Porphyry 140, 141, 146n3, 146n7; *Eisagoge* 21; *Isagoge* 44
 Porro, P. 105
positio game 58, 59–71, 73; Burley 59–67; Swyneshead 67–71; *see also* logic games
 “possible intellect” 216, 222n5, 228, 229, 294–296, 309; *see also* intellect
Posterior Analytics (Aristotle) 20, 23, 24, 25, 27, 31, 33, 44, 50, 94n6; *see also* Aristotle
potentia habitualis 322; *see also* habitual cognition
 “power of hearing” 218; *see also* common sense; internal senses; powers
 “power of vision” 218; *see also* common sense; internal senses; powers
 powers (dispositions): Aquinas, Thomas 108–111; Henry of Ghent 111–114; Ockham, William 118–120; Scotus, John Duns 114–118; *Quaestiones super De anima* 9; *Treatise on God as First Principle* 155f, 165
 “powers of the soul” 221, 222; *see also* powers (dispositions)
 prime matter 79, 80–84, 87; *see also* hylomorphism
 primitive readiness theories (of consciousness) 254, 256; *see also* consciousness
 primitive self-acquaintance 255; *see also* consciousness
 principle of instance uniqueness 98; *see also* no-transfer principle; principle of subject uniqueness
 principle of subject uniqueness 99; *see also* no-transfer principle; principle of instance uniqueness
Prior Analytics (Aristotle) 20, 23, 27, 35, 37, 44, 50, 54, 55n4; *see also* Aristotle
 “proper prudence” 360
 propositional reasoning 39–40; *see also* syllogisms
 propositions: doubting 62–63; granting 65–66; irrelevant 62; language and cognition 6–7; matters 64–65; medieval interest in 5; mental 7–13
 Protestant reformation 395
 proto-modistic approach (of propositions) 14; *see also* propositions
 proximate matter 87; *see also* hylomorphism
 Punch, John 156
 Putnam, Hilary 304
 Pyle, Andrew 184, 192
 Pythagorean theorem 228
- Quaestiones Disputatae de Anima* (Aquinas) 110, 238; *see also* Aquinas
Quaestiones super De anima 9 (John Duns Scotus) 253; *see also* Scotus, John Duns
Quaestiones super Libros Metaphysicorum Aristotelis 9.5 (John Duns Scotus) 114, 115; *see also* Scotus, John Duns

- qualification 19; applications 28–29; Aristotelian theory of reduplication 21–28; Greek sources 20; medieval developments 20–21; *see also* qua proposition; reduplication
 qualitative change: addition views 197–200; motivation 194–195; simple views 196–197; *see also* accidental change
 qua proposition 26; accidental 28; *see also* qualification; reduplication
 “quasi-tactile” consciousness 257; *see also* consciousness
Questions on the Metaphysics (John Duns Scotus) 238; *see also* Scotus, John Duns
Questions on the Treatise of the Soul (Peter Ailly) 310; *see also* Ailly, Peter
 Quidort, Jean (John of Paris) 399; *see also* John of Paris
Quodlibets 326, 328

 “radical Aristotelianism” 237; *see also* Arabic Aristotelianism; Aristotelianism
 rational appetite 323–325
 Rea, M. 129; *see also* material constitution
 “real propositions” 16n28; *see also* propositions
 reduplication 6, 19, 20, 25; *see also* qualification; qua proposition
 reduplicative propositions 20, 25, 27; *see also* qualification; qua proposition; reduplication
 reduplicative sophisms 29; *see also* qualification; reduplication
 reduplicative type 20, 26, 27; *see also* qualification; reduplication
 reflexive mental act 16n32, 258; *see also* consciousness
 reist camp (about propositions) 10, 11; *see also* propositions
 relations 96–97; and their converses 100–102; and their foundations 102–104; and their subjects 98–100
 “*remoto Christo*” 367
 Renz, Ursula: *Klassische Emotionstheorien: Von Plato bis Wittgenstein* 242
Rhetoric (Aristotle) 244; *see also* Aristotle
 Richard of Mediavilla 104
 Robert of Melun 331n13
 Roman divinities 395
 Roman law 380
 Roscelin of Compeigne 146n5
 Rufinus (of Bologna) 380

 St. Jerome 184, 354, 357, 362
 sameness: and difference, basic Aristotelian kinds of 126–127; elaborations on basic framework 127–129; *see also* identity
 scholastic method 2
 Schwenkler, John 260n1

scientia moralis positiva 348
 Scotus, John Duns 2, 7, 9, 10, 15n9, 15n22, 15n25, 26, 50, 51, 82–84, 89, 94n21, 102, 104, 107, 111, 114–118, 120, 122n15, 127, 129, 130, 133, 136n11, 145, 146n17, 146n18, 154–156, 164, 166–169, 180, 181, 185, 191, 196, 198, 200n8, 200n9, 205, 229, 238, 239, 246, 247, 252–253, 259, 273, 274, 284, 285, 288, 291, 295, 297, 328–330, 342, 343, 345, 346, 351n4, 359–362, 372n35; on causality in world 168–169; on interdependence of causal relations 165–168; *Quaestiones super Libros Metaphysicorum Aristotelis* 9.5 114, 115; *Questions on the Metaphysics* 238; *Questions on the Treatise of the Soul* 310; *Quaestiones super De anima* 9 253; *Treatise on God as First Principle* 165
secundum quid ad simpliciter 21–22, 26, 27, 29
 Sellars, W. 169, 170
 Seneca 184, 407
 sensory activity, consciousness of 253–254; *see also* common sense; internal senses
Sentences (Peter Lombard) 161, 354, 366, 398; *see also* Lombard, Peter
Sententia de anima (Albert the Great) 271; *see also* Albert the Great
 Shapiro, Lisa: *Emotion and Cognitive Life in Medieval and Early Modern Philosophy* 242
 Siger of Brabant 216–217, 221, 222n5, 222n6, 237, 238, 292, 293, 325, 326; *On the Intellective Soul* 217; *see also* Arabic Aristotelianism; Aristotelianism; radical Aristotelianism
 singular inferences 52–53
 Sinkler, G. 72
sit verum game 59; *see also* logic games
 “skeletal” arguments 41n2
Small Treatise on Quantity (Bonetus) 191
 Smolin, Lee 210
 Sobol, P. 163
Sophismata (Richard Kilvington) 34, 71; *see also* Kilvington, Richard
 sophistical arguments (sophisms) 32, 34–35, 57; *see also* sophistical syllogism
 sophistical refutations 31; *see also* sophistical syllogism
Sophistical Refutations (Aristotle) 21, 34, 47, 136n1; *see also* Aristotle
 sophistical syllogism 35; *see also* insolubilia
 Sorabji, Richard 231, 242
 space as incorporeal extension 175–176
 Spade, P. V. 15n14, 41, 59, 64, 67, 71–74, 94n10, 94n12, 128, 136n4, 146n18, 147n19, 167, 293, 312n4
 specificative proposition 26; *see also* qualification; qua proposition; reduplication
 specificative type 20, 26; *see also* qualification; qua proposition; reduplication
 spheres of power 394–401

- spiritual matter 79–80, 222n10; *see also* hylomorphism
- “square of opposition” 45, 51
- stellar nucleosynthesis 209
- stoic-informed natural law thinking 385
- Strode, Ralph 71, 73
- Stump, Eleonore 59, 67, 71, 72, 73, 74, 84, 111, 120, 167, 236, 372n37
- Suarez, Francisco 82–83, 105, 120, 156
- “substantial change” 80, 93; *see also* hylomorphism
- substantial forms 87–89, 93; pluralism *vs.* unitarianism about 89–90, 217–221; *see also* hylomorphism
- substantial unity (per se unity) 89, 93, 132; *see also* hylomorphism
- Summa Contra Gentiles* (Aquinas) 206; *see also* Aquinas
- Summa de bono* (Philip the Chancellor) 322; *see also* Philip the Chancellor
- Summa de homine* (Albert the Great) 233, 271; *see also* Albert the Great
- Summa logicae* (William Ockham) 71, 307, 308; *see also* William Ockham
- Summaries of Dialectic* (John Buridan) 33, 40; *see also* Buridan, John
- Summa Theologiae* (Aquinas) 108ff, 121n5, 207, 223n17, 234–236, 272, 284–285, 305n2, 313n24, 325, 372n36, 372nn38–49; *see also* Aquinas
- Summulae* (John Buridan) 35, 44, 48; *see also* Buridan, John
- Summulae Logicales* (Peter of Spain) 44; *see also* Peter of Spain
- Suppes, P. 84
- Sutton, Thomas 259, 260
- Swyneshed, Roger 41, 59, 60, 67–71, 73, 74
- Sylla, E. 200n2
- sylogismos* 45; *see also* syllogisms
- syllogisms 35, 37, 45–47
- syllogistic arguments: assertoric syllogisms 35–37; divine 38; extended 37; modal 37
- syllogistic reasoning 343
- syncategoremata* 12, 131; *see also* syncategorematic terms
- syncategorematic terms 12, 16n36, 24, 309, 311, 327
- synderesis (synteresis) 357, 359
- teleological conceptions 143, 162ff, 165, 168, 272, 348, 350, 358, 380, 397, 399
- Tempier, Stephen 228, 237, 326
- temporal modals 48–49; *see also* modal logic; modal operators
- theological voluntarism 345
- theory of diachronic identity 135; *see also* identity
- theory of supposition 8
- thesis rule (for games) 58, 59, 67; *see also* logic games
- Thierry of Chartres 150
- Thierry of Freiberg 256
- Thom, P. 37, 50, 105, 129
- Thomistic modal account (of the common sense) 270; *see also* common sense; internal senses
- Toivanen, J. 252
- Topica* (Cicero) 44
- topical arguments 38–39
- Topics* (Aristotle) 31, 32, 34, 38, 40, 49, 71, 126, 127, 132, 219; *see also* Aristotle
- Tractatus De Exponibilibus* (attributed to Peter of Spain) 24
- Tractatus noticiarum* (Gervasius of Waim) 311; *see also* Gervasius of Waim
- Transformationen der Gefühle. Philosophische Emotionstheorien 1270–1670* (Perler) 242
- Traversari, Ambrogio 184
- Treatise on Concepts* (Paul of Gelria) 309; *see also* Paul of Gelria
- Treatise on Consequences* (John Buridan) 45, 52, 53, 55; *see also* Buridan, John
- Treatise on God as First Principle* (John Duns Scotus) 155f, 165; *see also* Scotus, John Duns
- Trevisano, Marco 185
- Triumphus, Augustinus 398, 404
- Tweedale, M. 146n3, 146n5, 146n7, 146n16–146n18, 147n19
- Uckelman, S. 38, 41, 55, 72–74
- Ullmann, W.: “Aristotelian revolution” thesis 403
- “universal hylomorphism” 222n10
- Vio, Tommaso de (Cajetan) 156
- “Voluntas” 232; *see also* will
- Walsh, J. 392
- Walter of Bruges 237, 326
- White, Nicholas 127
- will 341; Aristotelian synthesis of Thomas Aquinas 234–236; Augustinian tradition 231–234; clash 237–239; nature and 329–330; *see also* freedom; *liberum arbitrium*; powers (dispositions)
- William of Auvergne 233, 255, 257, 339
- William of Auxerre 233, 321
- William of Champeaux 150
- William of Conches: *Dialogue on Natural Philosophy* 185
- William of La Mare: *Correctorium fratris Thomae* 237
- William Ockham 2, 7–11, 15n21, 15n25, 16n26, 16n32, 21, 25–27, 41n1, 88, 89, 103–105, 107, 111, 118–120, 128, 129, 132–134, 136n12, 145, 146n19, 147n21, 150, 155, 162, 164, 176, 185, 190, 196, 197, 199, 200n6, 200n10, 217–219, 222, 223n13, 225, 229, 232, 239, 242, 246, 247, 252, 259, 273–275, 285, 288, 291, 296–297, 306, 309, 311, 312, 312n6, 330, 342, 343, 345–348, 350, 361–362, 387, 390, 394, 400, 404; on chance and fortune 169–170; on habits 170–172; reductionism 177; *Summa logicae* 71, 307, 308

Index

- William of Sherwood 32–34, 37–39, 41n3, 49,
71, 131, 132; *Introductiones in logicam* 22, 29, 32,
34–36, 38–39, 41n3, 48–49, 55n2
Williams, S. 103, 105
Wodeham, Adam 12, 14, 16n35, 185, 247
Wolter, Alan 127, 136n2, 277n34, 342
Wood, R. 190, 351n10, 351n14
Wyclif, John 11, 185, 189, 192, 394, 398,
400, 401
Wylton, Thomas 196, 198, 199, 200n7
Yrjonsuuri, M. 59, 67, 71, 72, 74, 312n4
Zeno of Elea 188